# AMIGA FORMAT

£3.95 ■ NOVEMBER 1994 ■ ISSUE 65

See back cover

## £149 COMPLETE PACKAGE!

**Pixel 3D Professional**

### AMIGA FORMAT
Disk 65a

## PIXEL 3D PROFESSIONAL
Needs 1Mb

Worth £149!

Create fantastic 3D logos, text and objects with this brilliant 3D utility.

**Sensible Golf**

### AMIGA FORMAT
Disk 65b

Needs 1Mb

Keep out of the rough and on the green, it's the best golf demo we've ever seen.

## Painting with light...

**Find out how our cover artist used AF's *Pixel 3D Pro* Coverdisk to create this stunning image!**

**PLUS: Comprehensive image processing round-up page 117**

**REVIEWED:** Guardian, UFO, Robinson's Requiem, PGA European Tour, On The Ball
**PREVIEWED:** Aladdin, Pinball Illusions, Overlord, Legends, The Lost Eden and more

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# AMIGA FORMAT

ISSUE 65 ■ NOVEMBER 1994

## AMIGA NEWS

The VideoPilot V330 edit controller is back on the market and at a reduced price.

## MAIN FEATURE

### How the cover was created p30

Nick Veitch explains how Craig Collins put together the image on this month's cover using *Pixel 3D Professional v2* and *Lightwave 3.5*.
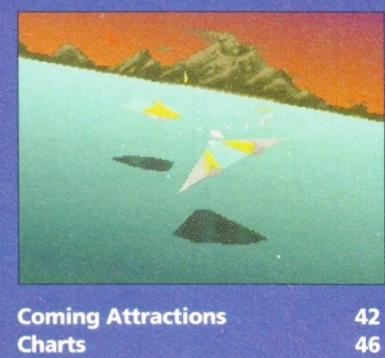
Some Jurassic relics get the going over in the *Lightwave 3.5* Modeller, prior to their appearance on the cover.

## SERIOUSLY AMIGA

## SCREEN PLAY

Page 41

Amiga Format's game of the month: *FIFA International Soccer* – p48

### Every new Amiga game reviewed and rated!

*Guardian* (left). Does Acid Software's new shoot-em-up have all the ingredients to make it a classic game? *UFO: Enemy Unknown* (right). An extra-terrestrial space-fest where you have to save the Earth from invasion by unfriendly aliens.

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CARGO SPACE 0
HELP CAPACITY 20

## COVERDISK 1: PIXEL 3D PROFESSIONAL    p10

Now you possess this powerful 3D graphics utility you can produce your own three dimensional artwork faster and more efficiently than ever before.

## COVERDISK 2: SENSIBLE GOLF p14

Exclusive to *Amiga Format* this month is Sensible Software's new golf game, the aptly-named *Sensible Golf*. It's time to put on those checked trousers and rev up the golf cart.

## HOW THE COVER WAS MADE    P30

Cover artist Craig Collins and Nick Veitch round up the tools and explain the process of how this cover image was created.

## IMAGE PROCESSING    P117

Give your images impact. Graeme Sandiford tests three commercial image processors and then assesses four PD programs.

# TUTORIALS

## PAGESTREAM 3    P92

Find out why the long-waited upgrade is a massive disappointment.

# REGULARS

## AMIGA FORMAT

**More people read *Amiga Format* than any other Amiga magazine on the planet!**

Welcome to *Amiga Format*. By choosing this magazine you have just made a very wise decision: this is the world's most popular Amiga magazine. And that means more Amiga users know us, trust us and choose to read us than anyone else.

Why? Because *Amiga Format*'s readers know they can trust our judgment and buying recommendations. Because we thoroughly test products, for one thing, and because we're not afraid to tell the truth. No matter how harsh it may be.

The proof? Commodore itself regularly chooses *Amiga Format* to prepare special editions of the magazine to be bundled with its machines. And surveys have consistently shown that retailers trust *Amiga Format*'s reviews above any other magazine.
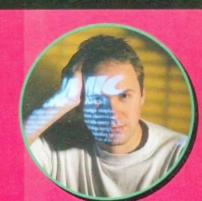
So you know you can read *Amiga Format* with confidence. Welcome to the world's biggest community of Amiga users!

*Steve Jarratt, Editor*

future PUBLISHING

# This Month IN VIEW

**It's the time of year to reflect on Christmas past. But Steve Jarratt prefers to concentrate on Christmas present and Christmas future...**

This month, Stuart Dinsey, the editor of industry paper *Computer Trade Weekly* (*CTW*) asked me to do a piece on Amiga games coming up over the Christmas season (hopefully, it'll appear in *AF* next issue). He'd spoken to a few retailers and they were gagging for some decent games – would they get any this Christmas, they were wondering? Because, much as consoles are great and everything, the bottom line is that they just don't make as much money as Amiga games do. And when push comes to shove, everyone in the computer trade needs the Amiga this Yuletide.

Well, after some intensive investigation, all I can say is that for a machine that's dying, on its last legs and coughing up blood, the Amiga is just about to have its most exciting Christmas ever!

Between October and January there are over 50 brand new Amiga games being released, including such classics as *Aladdin* (a gorgeous game – check out the preview this issue), *Cannon Fodder 2*, *The All-New World Of Lemmings*, *Zeewolf*, *FIFA Soccer*, *Dungeon Master 2*, *Sim City 2000*, *Rise Of The Robots*, *TFX*, *Jungle Strike*, *Sensible World Of Soccer*, *Alien Breed 2: Tower Assault* and, get this, *Mortal Kombat II*.
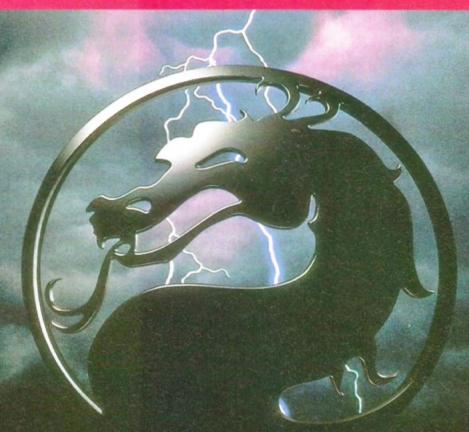
At the last minute, Acclaim – who haven't had an Amiga release for some time – decided to commission Probe Software to produce an Amiga version of the cult beat-em-up which has received rave reviews on the SNES and Mega Drive and has taken the coin-op world by storm.

So now blood-hungry Amiga gamers have no reason to complain about getting left behind. And there's a good chance we'll have a demo on our Coverdisk very soon, so stay tuned, sports fans!

**One of my** highlights this month (it's been quiet) was meandering around the Live '94 show, drooling over all the big tellies, AV amplifiers, video cameras, Dolby Surround systems and all that malarkey – I'm a real sucker for new technology. (Incidentally, the star of the show was Sony's stand which was just awesome. At one point you were guided through a circular tunnel lined with around 200 TVs. A very singular experience, I can tell you.

Philips were there flogging their able but under-specced CD-i machine and Panasonic's 3DO system was in attendance. Of course, Commodore's recent troubles have prevented them from attending – and a damn shame it was too. Philips were crowing about their Digital Video with loads of monitors playing *A Fish Called Wanda*, *Indecent Proposal*, *The Hunt For Red October* et al. Of course, had CD³² been there it could have done the same.

And while CD-i desperately tried to engender some interest in its FMV (Full Motion Video)

'games' *The 7th Guest*, *Chaos Control* and *Mad Dog McCree* (!), CD³² could have been showing off belters like *Guardian*, *The Lost Eden* – and God knows how many other top Amiga games.

And both the A1200 and CD³² would have acquitted themselves well compared to Nintendo and Panasonic. Nintendo were concentrating on the Super Game Boy which allows you to play 8-bit Z80 Game Boy games on a TV in colour. The term 'retrograde step' springs readily to mind. And their Super Nintendo product was less than awe inspiring – the CD³² would have beaten it hands down.

Panasonic put up a decent stand with as many good 3DO titles as they could muster, but again the Amiga has a wider range of playable titles. Many of the 3DO titles are all show and no go, and for every *John Madden Football*, we have a *Sensible World Of Soccer*; for every *Shock Wave* we have *Guardian*, and for every *Mega Race*, we have, well, *Mega Race*!

The Amiga itself would have found favour with the home video crowd: only Sony displayed any video editing hardware, and, of course, the Amiga was born to be used with video.

So, all in all, Commodore and the Amiga missed out badly. Let's hope that by next year the Amiga will be showing off as usual. *Amiga Format*'s latest ABC (Audit Bureau of Circulation) figure is in, which signals the average number of people buying *Amiga Format* each month from January to June 1994.

**And even though** the overall figure is down a tad from 142,326 to 132,137, *Amiga Format* is still a major force to be reckoned with, selling just 5,000 fewer than *Top Gear* and beating major titles like *GQ*, *Time Out*, *NME* and *Practical Parenting* (which, after all, sits right next to the flippin' cash tills in Sainsburys).

In the top 100 biggest-selling magazines in the whole of the UK, *Amiga Format* comes a very respectable 81st. Especially when you consider that it covers one single computing format, and that the format hasn't had a very good year!
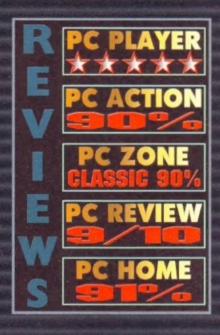
However, the last few months have seen *Amiga Format* really start to roll – and it's only going to get better (and bigger). So a big thanks for your continued support.
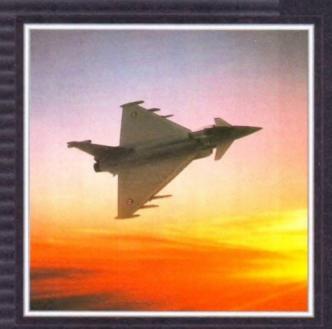
Hopefully, the Amiga will soon be back in production and back where it belongs – as the number one home computer in the UK.

# TFX

"It's more than a straight flight sim:, D.I.D. have emulated multi-million dollar flight simulators. When you play TFX the first thing that hits you is the detail of the landscape... over seven million square km appears on screen, with hills, roads and mountains all in the right place." THE EDGE

"The graphic detail is quite superb, with stunning visuals and strong sense of image, TFX is quite often like watching a movie... when I first saw TFX my jaw dropped so far it took me 15 minutes to find it again! It's fast, good looking and fun." PC REVIEW

Tactical Fighter Experiment... the only choice worth making where state of the art flight simulation is concerned.

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TFX... a simulation at the cutting edge of aerial combat enhanced by unprecedented in-depth research and authentic flight detail.

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# AMIGA FORMAT COVERDISKS

## WITH THIS MONTH'S COVERDISKS YOU CAN...

Create 3D masterpieces with *Pixel 3D Professional v1*. This 3D graphics utility is essential for Amiga artists everywhere.

Play *Sensible Golf*. An exclusive-to-*Amiga Format* three-hole demo with bunkers, putting and a little bit of rough.

# PIXEL 3D PROFESSIONAL V1

If you own a ray-tracing program then you need *Pixel 3D Professional*. **Jason Holborn** explains why it's possibly the most useful 3D graphics utility ever.

Thanks to *Amiga Format*'s very popular *Imagine 2.0* Coverdisk, virtually all *AF* readers now have a ray-tracing program. Some of you may even have upgraded to *Imagine 3.0* through our special £95 offer, or perhaps you've treated yourself to *Caligari* or even NewTek's *Lightwave*. Either way, you will love *Pixel 3D Professional*...

*Pixel 3D Professional* is a powerful 3D object utility that takes over where most ray-tracing packages stop. *Pixel 3D Professional* can be used for all manner of wonderful 3D work which, when used in conjunction with your favourite rendering program, enables you to produce artwork much faster and more efficiently than ever before. Here's a quick run-down of what *Pixel 3D* is capable of.

**Object conversion**
Have you ever wanted to port an *Imagine* object into *Lightwave* or a *Caligari* object into *Sculpt 3D*? If
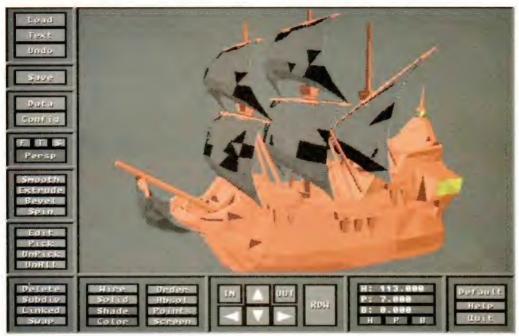
you have then you'll already know that each of these programs uses its own proprietory format which is incompatible with all other object formats. With *Pixel 3D Professional*, however, you can load objects in 14 (yes, 14!) different object formats and then save them out in whichever format you require. This feature alone makes *Pixel 3D Professional* a must for all 3D artists.

**Bitmap conversion**
Constructing complex 3D objects such as logos can be very difficult, but not any more. Simply draw your logo in a paint program and then load it into *Pixel 3D Professional* and it automatically converts it to 3D. Once converted, your logo can then be extruded, bevelled and even spun in three dimensions.

**3D text**
*Pixel 3D Professional* can convert any Amiga bitmapped font into a 3D object which, like your

**If you love your Amiga you'll want the best for it. And *Amiga Format* is here to find the very finest quality software on the market and then put it on our Coverdisks.**



Convert objects between different 3D formats with *Pixel 3D Professional* on this month's Coverdisk.

bitmapped logos, can be extruded and generally messed about with to your heart's content. Simply enter your text, tell it which font and point size you want to use, et voila! – instant 3D text.

**Object editing**
For quick and easy 'on the fly' editing, *Pixel 3D*

*Professional* allows you to edit the individual points that make up a 3D object. Points can then be moved and deleted with ease. It is perfectly possible to modify a 3D object within *Pixel 3D Professional* without having to reload your ray-tracing program.

## SPECIAL OFFERS

To help you get the very most from your *Pixel 3D Professional* Coverdisk, why not take advantage of these two special offers arranged with Axiom Software on your behalf by *Amiga Format*.
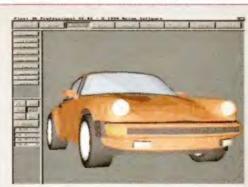
### PIXEL 3D PROFESSIONAL MANUAL

For just £14.99, you can get your hands on the official *Pixel 3D Professional* manual. This comprehensive ring-bound manual is an essential guide to *Pixel 3D Professional*.

Subjects covered include loading and saving objects, text and bitmaps, object editing and manipulation functions, configuring *Pixel 3D* to suit your own particular needs, polygon flipping, division, doubling and reduction and how to use *Pixel 3D Professional* objects in programs such as *Imagine* and *Lightwave*.

### PIXEL 3D PROFESSIONAL 2 UPGRADE

Some said it could never be done but Axiom have managed it – they've produced an upgrade to *Pixel 3D Professional* that's better than ever. Version 2 (reviewed on pages 100-101 of this issue) offers a whole host of new features



Get from most from your ray-tracing with *Pixel 3D Professional 2*, the essential upgrade.

including full AGA graphics support (view objects in 256 colours), real-time 3D painting, all-new Z-Buffer rendering modes, complete PostScript font and file import support and much, much more. And you can buy this essential upgrade for only £129 – that's a massive £70 off Axiom's recommended retail price!

Both of the above items can be ordered through *Amiga Format*'s mail order department. Contact them on 0225 822511. Alternatively, turn to page 18 for an order form.
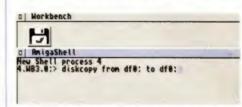
## BACKING UP YOUR COVERDISK

Copying your Coverdisk is very simple. Just follow the stages below...
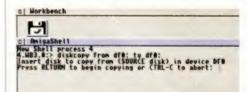


**1** Boot up with your Workbench disk, and find the icon called Shell, which should be in your system drawer.

Double-click on this to go into the Shell itself.



**2** Type in the following line exactly as it appears here, taking care to put the spaces in the correct places:

DISKCOPY FROM DF0: TO DF0:
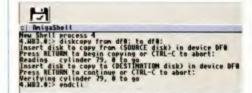


**3** When asked for the source disk, insert the Coverdisk and press Return. All of the information on this disk will then be copied from the disk into memory.



**4** Once your Amiga has read the info, it will ask for the destination disk. Insert the disk you want to copy to and press Return. All information on this disk will be destroyed.



**5** On an unexpanded machine, the Amiga may ask for the source disk again, as it copies in chunks. Finally, type Endcli to close down the Shell. Your copy is complete.

## DISK NOT WORKING?

We take every care to test the Coverdisk software, but Future Publishing cannot accept any responsibility for any data loss or other damage occuring during its use. If your disk is faulty, send it back, including a stamped addressed envelope for a free replacement to:

*Amiga Format* (insert the name of the disk) Disk, Discopy Labs Ltd, PO Box 21, Daventry, NN 5BU.
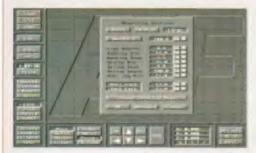
# GETTING STARTED

## FROM BITMAP TO 3D

By far the simplest method of creating a complex 3D object in *Pixel 3D Professional* is to draw your object in a paint program and then let *Pixel 3D Pro* do the hard work of transforming the image into a structured 3D object. Let's have a go at creating our own...

**1** The first thing you need to do is to create your bitmap using a paint program like *Brilliance* or *DPaint*. To make things a little easier, we've placed a bitmap of the *AF* logo on this month's Coverdisk which we'll use for this tutorial. Let's therefore start by pulling the bitmap into *Pixel 3D Pro*. Click on the Load button and a file requester appears. The *AF* logo file can be found in a drawer called PixelPro_Examples – enter this directory and then click on the file called AFLogo.Bitmap. After a few second's disk access, *Pixel 3D Pro* starts to transform the bitmap into an object.
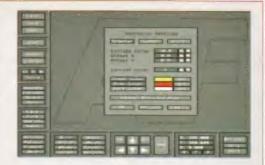
**2** After a few moments of heavy number crunching, you should end up with an outline of the *AF* logo on your Amiga screen. Just to prove that it is indeed now 3D, click and hold down the left mouse button inside the preview window and then drag the rectangle that appears to a more three dimensional angle. Once you're happy with it, let go of the left mouse button and your *AF* logo should be displayed in 3D perspective.

**3** Right, now click on the little F gadget at the far left-hand side of the screen. Before your very eyes, our *AF* logo should then appear as a series of linked black dots. These are the points that form the logo. At the moment, however, there are far too many points. Thankfully, *Pixel 3D Pro* provides a handy Smooth tool which can automatically remove unwanted points.

Click on the Smooth tool and the Smoothing Settings requester pops up. This requester allows you to fine tune how *Pixel 3D Pro* removes points. As it is, however, the default values suit our needs perfectly so just click on OK and *Pixel 3D Pro* starts to smooth our object. After a while, our AF logo should reappear but with a lot less points.

**4** Return to Perspective mode by clicking on Persp. Now let's extrude our title so that it is truly a three dimensional object. Click on
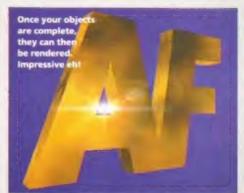
Extrude and the Extrusion Settings requester pops up. All we need to set here is the extrusion value (how deep the extrusion will be) so click on the arrow gadgets to increase the Extrude Value so that it reads 50.0.

Before we go any further, let's change the colour of the face and sides. First, the face colour. Click on the Front Color gadget to highlight it and then click on the Set gadget next to it. A colour requester appears allowing you to alter the RGB value of the face. For the sake of this tutorial, set red and green to 255 and blue to 0. Then click on OK and then repeat the same procedure with the Side Color gadget so that the side colour is set to red (red 255, green and blue set to 0). Once both colours are set, click on OK and *Pixel 3D Pro* does its stuff.

**5** You now have a wireframe representation of an extruded *AF* logo. But we can make it look even better – click on the gadgets Solid, Order and Color and then click on RDW (Redraw) and watch what happens. Why not try rotating the object to see it in true 3D. Don't worry if *Pixel 3D* doesn't always draw the object perfectly (some faces may overlap or show through others, for example) – once the shape is loaded into a ray-tracing program, it'll be displayed perfectly.

Once your objects are complete, they can then be rendered. Impressive eh!

## MOVE OVER LEONARDO,

The Save gadget allows you to save your 3D object to disk. The great thing about *Pixel 3D Pro* is that it is not restricted to one object format – your 3D objects can be saved to any one of 14 different object formats including *Lightwave*, *Imagine*, *Sculpt 3D* and *AutoCAD DXF*. This makes *Pixel 3D Pro* an invaluable tool for all 3D artists.

The Data gadget allows you to apply all manner of weird manipulations on your 3D data. You can, for example, perform vertical point reductions, reduce the number of polygons and so on. Once again, experimentation is the key.

The Config gadget allows you to fine tune how *Pixel 3D Pro* transforms a bitmap when it's first loaded. You might, for example, want to use Smoothing so that your bitmap is automatically smoothed after it's converted to a 3D object.

By default, *Pixel 3D Pro* displays all 3D objects in perspective (3D) mode. Although visually impressive, perspective mode is a preview mode only – you cannot edit the points that make up your object in this mode. If you want to edit your object, the F, T and S buttons switch between the front, top and side view editors. These three views are a bit like tri-view editors used by ray-tracing programs such as *Imagine* and *Lightwave*.
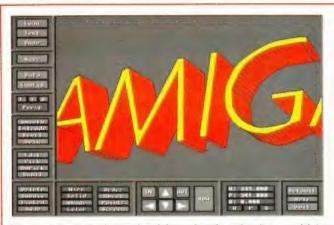
These four tools are handy when constructing 3D objects from flat surfaces and bitmaps. Smooth attempts to smooth out an object by removing unwanted points. Extrude, Bevel and Spin produce weird 3D special effects. As always, the best way to find out what these tools are capable of it is to experiment.

This group of four gadgets allow you to change the Edit mode when your object is displayed in one of the three plan views. Edit mode is without doubt the most useful because it allows you to manipulate individual points that make up your object. To edit a point, just click on it and it is highlighted. You can then delete it and even move it by dragging it around the screen while holding down the right mouse button.

When *Pixel 3D Pro*'s Point Editing mode is enabled, these gadgets can be used to manipulate individual or groups of points.

# PIXEL 3D PRO'S IN TOWN

Pixel 3D Pro can automatically generate 3D objects of any text that you feed it using standard Amiga bitmapped fonts (not outline fonts, however).
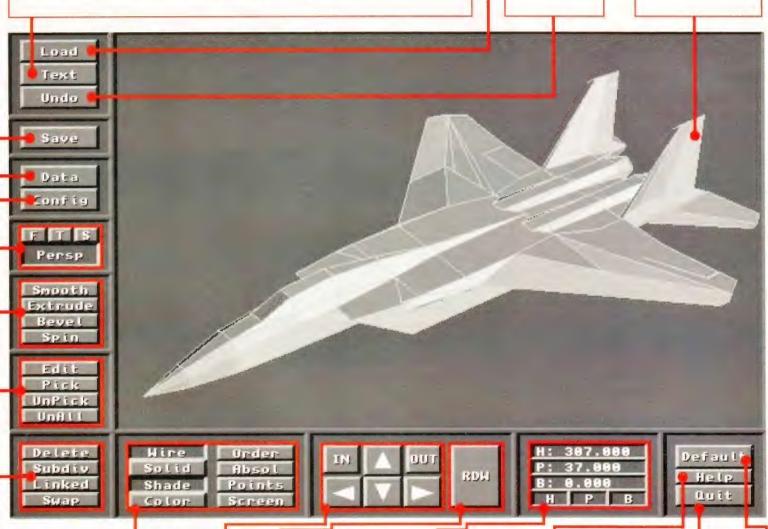
All you have to do is to click on the Text gadget and a requester appears asking you to enter some text. Type in the text you wish to be converted to 3D and you'll then be prompted to pick a font from those available on your system. To select a font, click on its directory entry

(Diamond, Topaz or whatever) and then select the point size you wish to use – such as 8, 9 or 11 – from the file requester. Pixel 3D Pro then transforms your text into a 3D object. You may find that the text is rather stepped – this can be cured by running it through the Smooth tool.

The Load gadget allows you to load either a 3D object or a bitmap into Pixel 3D Pro.

The Undo gadget allows you to restore your 3D object to its original state prior to the last operation.

The bulk of Pixel 3D Pro's screen is taken up by the object display window which displays a preview of your 3D object in a variety of different formats. You can also rotate the viewpoint so that the object is viewed at different angles – simply click and hold down the left mouse button inside the window and then drag the mouse pointer to move the object.

These eight gadgets define how Pixel 3D displays the preview of your 3D object. If just the Wire gadget is highlighted then you'll see a wireframe representation – click on the Solid button too and Pixel 3D performs hidden line removal so the object looks er... solid.

Once you've performed an operation on your 3D object, clicking on this gadget forces Pixel 3D Pro to redraw the object in the currently selected display mode.

Keeping track of where you are in 3D space can be confusing so Pixel 3D Pro has this status display detailing the heading, pitch and bank co-ordinates of the object. When rotating the object, you can control what direction it moves in by toggling the H, P or B buttons on or off.

If you still find any aspect of Pixel 3D Pro confusing then you'll be pleased to know that the program has full on-line help facilities. Activate the Help button by clicking on it and then click on the function that confuses you – a window pops up explaining what the function does and how to use it.

Pretty obvious this one – click on this gadget and Pixel 3D Pro quits returning you to the Workbench in the process.

Although it is possible to rotate your 3D object simply by dragging it with the mouse, Pixel 3D Pro also provides this set of six gadgets which allow you to adjust the heading and pitch of the object and even zoom in and out to view the object at different levels of magnification.

Clicking on this button allows you to fine tune how many of Pixel 3D Pro's tools work. You can, for example, set default values so such things as the degree of bevelling and so on can be permanently fixed.

# SENSIBLE GOLF

**Exclusive to *Amiga Format* and on our game Coverdisk this month is Sensible Software's stunning *Sensible Golf*. Fore!**



The gadget that indicates the amount of power going into a shot on the power bar. One click activates it. Another click records the power going into the hit.

This area represents a complete miss-hit of the ball. Miss too often, and the program mocks you.

If the power gadget is clicked on either yellow, the ball hooks or slices.

Club selection takes place here. Up and Down on the joystick runs through the choices available.

Red marks the spot. If you click when the power gadget reaches here, the ball is hit as straight as an arrow.

It's pretty hard to putt the ball with all these stupid great big boxes in the way, still never mind eh?
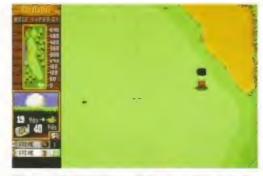
L ook at this page. Look at the *Sensible Golf* Coverdisk on the front of this magazine. Look around you and take in the location. Notice anything special? No? Well you should.

Because this month's *Amiga Format* is the only magazine in your hands, in your street, in your town, in your county, in your country, in your continent, in your earth, in your solar system, in your galaxy to feature a demo of Sensible Software's up and coming brand new golf game, *Sensible Golf*.

We've managed to get hold of the game so early that even the programmers didn't know we had it until this morning.

Unfortunately, there's a down side to all this euphoric hip-hip-hurrahing in the shape of a few in-game bugs. Take a look at the little red box at the bottom of this page which highlights the major bugs that we have found. If you find any other bugs that we haven't listed here, congratulations, you're probably one of the first people in the entire galaxy to find them. So, many apologies for the bugs, we hope you enjoy the game anyway.

Controlling *Sensible Golf* is easy. Simply plug a joystick into the mouse port. Moving up and down on the stick cycles through the clubs available and the information box above each club's icon tells you the maximum distance that the club can hit a



The arrows indicate the run of the green. Take note of them and plan your shot accordingly.

ball. Move the stick from side to side to align the cursor with the direction in which you want to send the ball.

## IT'S EVEN GOT A WIDGET

Click on the fire button and a power meter appears in the top right-hand side of the screen. Click again, and a power indicator moves toward maximum power.

Now click when the marker reaches the power required on the scale and a small gold widgit records exactly where you clicked. The widgit continues on its journey to the end of the power meter and then makes its way back to the start position.



A change of club is sometimes better when playing out of a tricky situation. Hit the fairway, not the trees.

This is where timing and a steady hand are important. You'll notice at the southern-most point of the power meter that there's a red marker. Press the fire button when the indicator is in the red. On either side of the red, there's a yellow and grey buffer zone. If you click in the grey zone, it's a miss-hit – in the yellow it either hooks or slices the ball.

To obtain an aerial view of the courses, simply hit the space bar – this lets you work out where the best place to put the ball is. To scroll up and down the map, use the requisite controls on the joystick.

And that's it. There are three holes to be played altogether. Have fun and good luck. ☺



The full game will have 72 holes which make up 20 courses around the world.

# AMIGA FORMAT COVERDISKS

We hope your Coverdisk is working fine, but if not, these hints, tips and corrections may sort out the problem for you quickly and easily.

## EXTRA!

### FRACTALPRO AF56

Several people claimed that this program simply didn't work after they had selected Draw. The software indicated that it was drawing but nothing ever happened.

Have patience. If you had to calculate the cube roots of some equation to 20 decimal places for each pixel on a hi-res screen, it would probably take you more than two minutes.

You can flip to the fractal screen and see things being drawn using the standard Amiga screen flipping keys (Left Amiga and N or M).

### PROVECTOR AF58

There is nothing wrong with this one. It uses the ARP.library, as do many other Amiga programs. This library, like all other libraries, has to be located in the LIBS drawer of the start-up disk. If you are booting up from Workbench, this is the LIBS drawer on that disk.

The ARP.library is provided with the disk, in the LIBS drawer, so you can just copy it to your boot-up disk. For example, put the *ProVector* program disk in the drive and type:

```
copy df0:libs/arp.library   Libs:
```

### MUSIC-X AF58

A600 owners, and anyone else with only Chip RAM, should follow the instructions for A1200 owners, otherwise they will find they have little room for samples.

Also, many people seem to be getting a message regarding missing fonts. The fonts are on the disk, OK! If you boot up from the *Music-X* program disk, like it says to do in the instructions, there's no problem.

If you want to boot off any other disk, copy the font into the FONTS: drawer of your boot-up disk. This is not complicated – it is how the Amiga works (and the PC and the Mac).

### DEMO MANIAC AF60

There are lots of problems with this, because Black Legend gave us a very bug-ridden product. If you are getting unexplained gurus, the most likely cause is a software bug.

### PAGESETTER 2 AF63

There don't seem to be any problems with this program, but a few people seem to be having difficulty with fonts. *PageSetter 2* works with CompuGraphic fonts, but it needs an .atc file. If your font doesn't have one, *PageSetter 2* won't recognise it.

### THEME PARK AF64

Not a problem, but a cheat. If you press the C key during the loading screen a message appears, informing you that the cheat mode is active. You will now have lots of cash to buy oodles of rides and things!

### LIBS, FONTS AND ALL THAT

There are lots of files and commands associated with the normal operation of software. You may not see them until you try to install software:

**LIBRARIES** – These are compact routines which are compiled as a separate library. They contain commonly-used routines so programmers can write new utilities without having to re-code all the basic routines all the time. Libraries should be located in the LIBS drawer of your start-up disk.

**FONTS** – Amiga fonts come in many varieties, but the most common are bitmap fonts. The majority of programs use the system fonts, but some use their own. In this case, the font must be present in the FONTS: drawer of your start-up disk.

**ASSIGN** – The assign command is used to make pathname shortcuts. It does this by creating a logical or virtual device – one that doesn't exist, but points to a pathname that does. The usage is:

```
Assign   <device name>   <path name>
```

So, if you had installed a program from disk called *Paint* and installed it to a hard drive in the utilities drawer, your command might look like:

```
Assign Paint: hd0:Utilities
```

### IN GENERAL

A few things to remember about Coverdisks:
● Read the instructions fully.
● With most disks, it is usually easier to boot up from the actual decompressed Coverdisk. This disk has all the fonts, libraries and devices required by that program.
● If you boot from another disk, you may have to copy some libraries or fonts over. Use the copy command, or drag the files, having first switched on Show All Files mode.
● To install your software on a hard disk, you may have to make an assign or two. The assigns should be of the original disk name, and point to the new file path.

# A free watch worth £35.99*
## with every ABC colour printer bought before 30th November 1994.

# THERE'S NEVER BEEN A BETTER TIME TO BUY AN ABC PRINTER.

Now is definitely the time to get your hands on the new, easy-to-use Citizen ABC Colour Printer. That's because we're giving away a "Life"† watch absolutely free with every one. But hurry! Time's running out. The offer ends on 30th November 1994.

The ABC delivers outstanding colour graphics and crisp clear type. And with its EasyStart software setting it up is quick and easy. It's totally Amiga compatible and can handle virtually any paper including cut sheets, labels, multi-part stationery and envelopes. So now you can get a superb colour printer at an incredible price and still be left with time on your hands. Don't waste another second, buy a colour ABC and send off for your free watch today.

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## CITIZEN
### COLOUR PRINTERS

PIXEL 3D OFFER

NOVEMBER 1994

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# NEWS

- ● Amiga gamers to get *MKII*!
- ● VideoPilot – back at a bargain price.
- ● Upgrade to OS 3.1 with £10 off.
- ● The Commodore saga continues.

# MORTAL CHRIS

With Commodore's recent problems plus the continual invasion of Japanese consoles, many pundits have predicted a rather dismal Christmas for the Amiga. However, *AF* is happy to report that this year promises one of the most exciting yuletides Amiga gamers have ever had. There are over 50 top-notch titles winging their way shopwards over the next couple of months – including many A1200 and CD³²-specific titles.

And the good news is that alongside the inevitable sequels to *Cannon Fodder*, *Lemmings*, *Sim City*, *Sensible Soccer* and *Dungeon Master* is the sequel all Amiga games have been pining for: *Mortal Kombat II*.

Probe Software took it upon themselves to write an Amiga version – which is a direct port of the acclaimed Mega Drive game – and Acclaim will take it from there.

"We took the decision to progress with the conversion of the game," explains Probe's MD, Fergus McGovern. "We've done this as an independent resource for Acclaim, who eventually will publish the title or licence it, as they did last year, to a third party publisher.

"We feel that the game is warranted on the Amiga, and we would very much like it to come out," he says. "Probe do very few Amiga titles, but when we do them we try and do the high profile games."

McGovern attests the decision to do the conversion to the reception of the original: "The game last year got such good press – I think most people thought the conversion was very good, and we wanted to do a conversion from the Mega Drive onto the Amiga this year."

*Mortal Kombat II* will be available for all 1Mb Amigas, will come on three disks, and will incorporate all the moves, fatalities and babalities that were originally included in the Mega Drive version. *Mortal Kombat II* also runs in a frame – ie. at 50 frames per second – which is basically as fast as the Amiga can go. And, Probe assure us, there's never any slow-down.

Next month...

## PageSetter 2 fonts for a fiver



*Amiga Format* readers who enjoyed playing with *PageSetter 2* on issue *AF63*'s Coverdisk will want to get their hands on Compass Software's new collection of fonts designed specifically to work with our Coverdisk DTP program.

Jon Lemmon of Compass has pulled together a five-disk pack containing 100 quality CompuGraphic outline fonts. Better still, you can get your hands on the entire set for just £5. Although designed to work with *PageSetter 2*, Compass's fonts can also be used with *ProPage*, *Wordworth 2* and *PageSetter 3*.

**Compass can be contacted on 0493 657734**

### DMA SPONSOR AF GALLERY

If you're a talented artist and want to get noticed then there's no better place than *AF*'s Gallery. And now our Gallery page is officially sponsored by DMA Design, the developers of hit Amiga games such as *Lemmings*, *Walker* and *Hired Guns*.

Dave Jones of DMA, was so impressed by the artwork in our Gallery that his company is now offering *AF* readers the chance to win a Tabby Graphics Tablet worth £55 every month! You may even be approached by DMA to produce artwork for one of their forthcoming games! Turn to page 170 for more information.

### Son of Spong!

Good news for all you frustrated Spongers. The *AF Bulletin Board Spong2!* is now available for uploads, downloads and various other interactive type things, to replace *Spong!* which has sadly passed away.

If you have a modem and you want to keep up to date with news, send in your Workbench letters for prompt attention or upload your gallery efforts without fear of them getting lost in the post you need to *Spong!*

So get yourself a modem and call Metnet, the home of *Spong2!* Metnet is run by Jon Whitty, who has kindly allowed us to run *Spong2!* in conjunction with his own board. Get yourself connected up with a modem and call 0482 473871, and you'll never *Spong2!*™ alone.

## AF spreads the Net

Hurrah for us! *AF* joins the Net, and if you have Internet access, you can send us mail at:

amformat@futurenet.co.uk

You can send us mail in the following categories: Workbench, for techie queries; Mailbag, for general letters; Queries, for other questions; Competitions, for competition entries.

You MUST include one of these titles as the subject for your message. In the case of competitions, you must use the title of the competition as the subject. If you don't, it will most likely get lost forever. If it doesn't get lost it will appear in the wrong place and upset the poor people who have to deal with all your messages – so expect a nasty reply.

Net veterans should note that, at the moment this is just a mail link. All the WWW and Mosaic stuff is still under construction, so you won't be able to do much except mail us here until further notice.

These pictures are from the Super NES version of *Mortal Kombat II*. If you want to see shots from the real, bona fide Amiga version, tune in to *Amiga Format*, next month!

# TMAS!

## NEXT MONTH

Just as we went to press with this issue, *Amiga Format* heard that in the next issue we will have the full exclusive on the Amiga version of *Mortal Kombat II*. The game is all but finished so next month we will have the full review, with all the special moves and everything you always wanted to know about this killer coin-op conversion described in gory detail.

Remember, next month *Amiga Format* will be the only place you can read all about *Mortal Kombat II* on the Amiga – not the Mega Drive or Super NES. Only *AF* will have screenshots from the Amiga version – and the authoritative review of what could be the biggest game of the year!

*AF66* – on sale November 17. Always first with the death moves!

# In your own time...

The decision on the fate of Commodore has dragged on long past the limits of human endurance, and still there is no definite decision from the liquidators.

The reason this time is thought to be that there are some late bids from Escom, a German company and CEI, an American distributor with close ties to Commodore. However, the management buy-out, which will re-form the company under the name Amiga International with the staff from Commodore UK, Commodore Canada and many of the US development team, is still believed to be the favourite.

The new company will be firmly dedicated to the future success of the Amiga. Although development of the AAA chipset, the successor to the AGA one currently found in the A1200 and A4000, has been shelved, this is in order to speed up the development of a RISC-based Amiga.

Such a computer would be able to support a multi-platform operating system such as *Windows NT*, which would increase its viability in an increasingly competitive market.

And just in case you can't remember what they look like, on the left is David Pleasance and on the right Colin Proudfoot.

The pressing worry is getting new machines into the shops before Christmas. David Pleasance has been pressing the liquidators to free up components and assembled machines so that the A1200 is sufficiently in evidence in the High Street during November.

Small numbers of machines are still managing to find their way on to the shelves from overseas, but not in the quantities demanded for a successful Christmas campaign.

The buy-out team have made the liquidators painfully aware that their bid is time critical. Next month, we hope to be able to give you the good news...

# The *Jeff Walker* Column

This month I had a rush of blood and splashed out £400 on new hardware for my Amiga. It was fairly complex hardware insofar as the software that came with it was multi-featured and enabled you to configure the hardware to your exact requirements.

Now then. The trouble with requirements is that you never know what they are until you are expected to configure something to them. Furthermore, this particular hardware came with a lot of utility software that introduces users to many concepts that they would never have come across before. So a good manual is paramount, a manual which explains in simple terms, and in detail, exactly what is and isn't possible, with examples drawn from real life. All the utilities need explaining; not just quick descriptions of the menus and requesters, but proper discussions of the concepts behind the utilities with, again, follow-through examples drawn from real life.

Digging around in the box, the manual was proving difficult to find. But what's this? A thin A5 photocopied booklet on photocopier paper, untrimmed edges, flimsy cover. Can't be, can it? Quick glance. Yup, it's the manual all right. Hmm. There's a lot of software here and a fair amount of setting up to do. I'm going to be dipping into this manual for quite some time I would think. That plain paper cover is not going to last five minutes!

Ah well, I'll be careful. As long as everything is fully explained, I'll live with it. But after spending an hour reading the complete manual, I am more confused than ever. It's poorly translated from German, and I'm expected to understand terms and concepts that are specific to this type of hardware and software without having them explained to me. This cost me £400 and the developers have skimped on the documentation!

They've skimped in two ways. First they have obviously decided that a proper technical writer would cost too much; and there is nothing worse than documentation written by the people who designed the hardware or wrote the software, or by a mate who did it for pin money. Second, they have decided that it would be too costly to produce a properly-bound manual.

Now I happen to have a little experience in both these areas and I can assure you that even with a small print run a budget of £5 per manual would have easily paid for both an expert technical writer and proper printing and binding. And a manual that costs £5 to produce is a very good manual. If this hardware cost £405 instead of £400 would I have baulked? Certainly not. And I'm sure nobody else would have. So why have I got a crap manual?

It got me to thinking, so I rummaged around and made a few calls to see what other manuals were like. I was shocked to find that many manuals for Amiga software and hardware are similar – badly written, cheaply produced with no thought for quality. It appears to be especially a problem with manuals that come with hardware. In a few cases, for hardware that costs hundreds of pounds all that is provided is a photocopied sheet or two.

Now, I also bought a relatively cheap bit of software recently – it cost £30. It wasn't complex software so I wasn't expecting a fancy manual. But in this case the manual was thoughtfully written and designed – it didn't try to pack everything into as small a space as possible I mean, and plenty of screen grabs were used. It was also professionally produced — properly typeset text on decent paper with a full colour card cover.

So tell me. How come my cheap £30 package came with a good manual and my expensive £400 package came with a grotty man... thing?

I am sick and tired of being treated like this. Is it any wonder companies complain that users don't read manuals when they are served up like afterthoughts and are written by people who have no idea how to write for inexperienced users? Why is it that so many Amiga companies see the manual as an inconvenience and an ideal way to cut costs? Could it be because these companies are run by ruthless businessmen whose only concern is the bottom line? Or is it just that they are plain stupid?

**THE OPINIONS EXPRESSED HERE ARE NOT NECESSARILY THOSE OF *AMIGA FORMAT***

## The *Tim Smith* Column

A t the end of *Heart Of Darkness, The Making Of Apocalypse Now*, Francis Ford Coppola dreams of a small girl in Kansas with a video camera who makes the next great movie. His wish is that the new technology will fall into the hands of those people unsullied by the studios, jargon, politics and historical baggage that goes with an industry fast approaching complacent middle age.

Francis is a bit of a dreamer – or he was before he made *Dracula* and now *Frankenstein*, I guess he needed the money. The point he is making however is a valid one, and one which may be possible for the world of film but is getting less and less possible for that of computers. Where, I wondered after sitting through *Apocalypse Now* itself (as you have to once in a while) are the new hardware makers going to come from?

With the Amiga's future dangling in the balance, and the PowerPC looking to take the world by storm – mainly because the world is to be given bugger all choice in the matter – we are left with toys or monoliths.

Yes, the Sony PlayStation can fling polygons around the place, and sure 3DO and CD-i are attempting to move away from games and into (Arghhhhh!) Family Edutainment Centres (neither Philips nor 3DO have said this, I just did, but that kind of Brady Bunch chippery is what we're looking at). Sure we're going to be getting 64-bit speed and simply billions of colours darlings. But have you ever tried programming on a Mega Drive?

The Amiga really must survive, as must the Acorn Archimedes and the ST, if we're not going to breed a generation of people who can merely gawp at what they're given or can only program in *Visual C For Windows*.

If there's one thing that Steve Jones' seminal book *Language Of Genes* has shown, it's that diversity is the growth catalyst. Without a diverse pool to dip into we're going to be left with a bunch of 11-fingered, banjo-playing kooks who can only think in single processor terms.

**We need to** have people tinkering away in garages saying: 'Screw the margins, this is fascinating man! This is really enjoyable' and 'Woah! I've just invented something brand new!'. We need these people as much as we need those other millions of people toiling away at making the same architecture marginally different so that the sell line will look slightly better on the Discovery Channel.

This thought struck home recently when I went to buy a PC. Yes, I admit it, I own an Amiga, a Mac, a PC and an Atari Lynx – diversity... and nerdiness. Wandering around the superstores in North London, I saw hundreds of boxes. They all looked a little different – a fin here, a moulded corner there, a door to get to the On button, some LEDs. Asking what the difference between them was I was told: 'Multimedia blah, blah' or 'EISA blah blah' or 'Networking capability'.

When asked what software they shipped with I was told 'Windows and DOS but a radical new Windows is around the corner. It can multitask'. Now, you don't have to be a genius to work out that this kind of fibbing homogeneity will inevitably lead us nowhere other than in a very tedious straight line to a dead-end very soon.

I mean pardon me if I'm wrong, but I thought that the one thing we were supposed to get from the white heat of technology and the last 15 years of market economics was choice. I think not. I think that if you went into any of the big computer makers and said: 'I've invented a machine that has independent custom processors, a multitasking operating system and it'll cost less than £500', you'd be politely asked to leave... probably to the sound of an 11-fingered banjo symphony.

Where is that little girl in Kansas? I hope she's on a computing course and I hope she's fiddling with an A500.

Tim Smith is Technology Editor of *Computer Trade Weekly*. Contact him at t.smith@cix.compulink.co.uk and tim.s@gateway.demon.co.uk.

**THE OPINIONS EXPRESSED HERE ARE NOT NECESSARILY THOSE OF *AMIGA FORMAT***

# VideoPilot back

T he VideoPilot V330 edit controller which earned an *Amiga Format* Gold rating of 92 per cent in Issue 51 is back on the market and it's almost £450 cheaper than its original price.

The news will delight Amiga desktop video enthusiasts because VideoPilot is one of the best editing suites we've seen at *AF* and it aroused huge interest when German company V3i released it a year ago. But the initial excitement was quelled when V3i ceased trading shortly after the VideoPilot's launch and UK stocks quickly dried up.

Now French company Universal Electronics have picked up the VideoPilot and it is available through UK distributors Ambervane (0792 476076) for £850 – the original price was £1,299.

**VideoPilot has the** ability to control up to three source machines – including vision mixers such as the Videonics MX1, Panasonic WJ-AVE5 and WJ-AVE7 – and one recorder. Apart from being able to lay Linear Time Code (LTC) on to the linear soundtrack of a master video tape, LTC can also be burned on to working copies of a master tape using a genlock. The rushes can then be used by third parties to select the in and out points of edits.

A Vertical Interval Time Code (VITC) test system is now built in to VideoPilot

# on course

The excellent VideoPilot editing suite is back on the market. It's available from Ambervane and has taken a huge price cut of almost £450.

which checks to see if a tape is suitable to be used with the previously notoriously unreliable VITC.

Ambervane are currently taking VideoPilot on an Autumn roadshow, demonstrating a complete VideoPilot post production system. Discussion groups and forums will explain the full benefits of such a set-up. The dates and locations of the shows are: Glasgow: October 24; Bristol: November 7; Cardiff: November 14; Manchester: November 24.

**For more details about the roadshow and information on the VideoPilot contact Ambervane on: Tel: 0792 476076.**

● At the top end of the video market, Digital Micronics Inc have released the first non-linear editing system for the Amiga. The Digital BroadCaster 32 is a Zorro 3 plug-in card for the A4000/40 and 4000 Tower. The full system, including hard drives, SCSI ll interface and Sunrize 16-bit stereo card for simultaneous CD-quality, costs £9,500. DBC 32 can also serve as a single-frame animation recorder or carry out time-lapse recording. Contact White Knight Technology on 0992 714539.

## HARD DISKS ON VIDEO

Power Computing's new Video Backup System 3.0 could be the answer to your back-up blues.

**P**ower Computing are distributing the new *Video Backup System 3.0*. Developed by Lyppens Software Productions in the Netherlands, VBS 3.0 provides everything you need to back up your hard disk to any domestic video recorder.

Hugo Lyppens, the designer of *VBS 3.0*, has completely recoded the program so it now fully complies with the look and feel of Workbench 2.0. Version 3.0 of the control software offers new back-up modes optimised for Amigas equipped with a 68020 or higher processor which doubles the speed at which *VBS* backs up data.

*VBS* can back up 85Mb of data in one hour, allowing a standard E180 three-hour video tape to hold 255Mb of data. The new version 3.0 software now adds data compression which increases the amount of data that VBS can handle to a massive130Mb per hour.

A new feature is the *VBS* Batch Backup mode which enables you to define a list of back-ups. You can now specify a list of partitions which are backed up one after another. *VBS 3.0* costs £59.95 and is available from Power Computing on 0234 273000. Watch out for a full review next month.

# Word Processors hot up

Process your words without having to work around the bugs with the new improved *Wordworth 3.1*.

And to counter the challenge of the new version of *Wordworth*, Softwood have released *Final Writer 3.0*.

**C**laimed to be 'the program that *Wordworth 3.0* should have been all along', Digita (0395 270273) have unleashed a major upgrade to the *Wordworth* word processing program. Version 3.1 (which will be reviewed in next month's issue of *AF*) promises to be faster, friendlier and more powerful.

Possibly the most important feature of *Wordworth 3.1*, however, is the fact that Digita have now tracked down and killed all known bugs so *Wordworth 3.1* should now be far more stable than its rather prematurely-released predecessor.

New features include enhanced tools – *Wordworth 3.1*'s Search And Replace function, for example, is

now 40 times faster than the previous release. Other additions are Landscape Printing, Drag And Drop Editing and improved Postscript support.
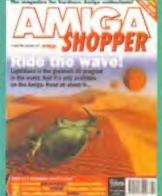
Hot on the heels of *Wordworth 3.1* is a new version of its arch rival, Softwood's highly-rated *Final Writer*. Although details are sketchy, version 3.0 of *Final Writer* is believed to be more of an update than a new release in its own right.

**For more information on *Final Writer 3.0*, contact Gordon Harwood on 0773 836 781.** Rest assured that we'll be pitting both programs together in a WP battle in next month's issue.

# NEWS brief

## PROTEXT PRICES DOWN 50%

Arnor have halved the price of their *Protext 6.5* word processor reviewed in Issue 64 of *Amiga Format* (78%). Arnor have slashed the price from £149.95, to just £74.95. For more information, contact Arnor on 01733 68909.

## ROCK SOLID VIDEO

German video specialists Electronic Design have launched a new video enhancer aimed at Amiga users. Their new TBC Enhancer can be used as a Time Base Corrector capable of stabilising any video signal. Electronic Design claim that the TBC Enhancer can significantly reduce colour flicker and shifting as well as removing the wave-like distortions produced by weak video signals. Contact Electronic Design on 010 49 89 354 5303.

## WIZARD DRIVE

If one floppy drive just isn't enough then get on the phone with credit card in hand and order yourself Wizard's new Saturn floppy drive. Retailing for just £49.95, the Saturn drive is based around a quality Sony mechanism and comes complete with anti-click and switchable anti-virus hardware as standard. Give Wizard a bell on 0322 272908.

## SCANNER AID

If your scans are suffering from incurable wonkiness then you'll want to get your hands on Golden Image's new two-in-one Scanner Pad And Mouse Mat. Retailing for just £9.95, the pad is designed to help hand scanner owners scan more accurately. What's more, the pad's built-in T ruler provides a handy guide for measuring scans. Golden Image can be contacted on 0181 900 9291.

## WATCH YOUR LANGUAGE

MagicKnight Software have unveiled details of their new Secal programming language, an *Assembly/C* replacement programming environment aimed at advanced programmers. Bundled with a wide range of useful utilities including map, object and intuition editors, Secal provides direct access to *Assembly* language resources through a high-level instruction set. Programmers can obtain direct memory access by calling MagicKnight on 081-478 0097.

## MORE VALHALLA FROM VULCAN

Vulcan Software are releasing a budget version of their popular *Valhalla* speech adventure. *Valhalla Before The War* will cost £14.99 and is intended to bridge the gap between *Valhalla Lords Of Infinity* and another full-scale release scheduled for Easter 95. Vulcan are also planning a new 168-level strategy game called *TIMEslip* for release next year. Call them on 0705 670269.

## Power and Shopper 'worth buying' claim

**N**ovember 1994 will be remembered as a vintage month by *Amiga Power* readers of the 21st Century. As they sit in their cellars, browsing through their back issues, they'll look back fondly at the review of *Pinball Illusions* – the greatest pinball game on the Amiga – and remember the fun they had with the exclusive Coverdisk demo of it. They'll gaze lingeringly at the reviews of *Guardian*, *Overlord*, *UFO*, and revel in the feature about why *Amiga Power* marks games as strictly as it does. And they'll marvel at how the whole lot, with two Coverdisks, cost just £3.95 – less than half the price of a bag of crisps.

**Jonathan Davies – editor *Amiga Power***

In this month's excellent issue we have a vast amount of staggeringly wonderful things, including our in-depth review of *Lightwave 3D* standalone. We've taken this program apart to find out what makes it tick. Is it really the single biggest step forward for mankind since the steam-powered trouser press?

Plus we review lots of other nice things, including the Blizzard 4030 A4000 accelerator, plus *Protext 6.5*. We also have a vast number of staggeringly good tutorials, including the latest instalments of our rapturously received tutorials on *Assembly* language programming and *AMOS*. What more could a serious Amiga user want?

**Richard Baguley – editor *Amiga Shopper***

## CD GAMES FOR A4000

The forthcoming CD³² version of *Mega Race* comes a step closer to your A4000 thanks to the Blittersoft emulator.

**G**otta 4000 with a CD-ROM drive? Wanna play the latest CD³² games? Then get yourself a copy of Blittersoft's new CD³² Emulator and you'll be tackling the likes of *Microcosm* and *Mega Race* in no time!

The £39.95 package, which is available from Blittersoft on 0908 220196, is designed to allow any AGA Amiga (including the A1200) equipped with a SCSI CD-ROM drive and at least 1Mb of Fast RAM to run the wide range of games software available for the CD³². Offering full emulation of the CD³²'s Chunky to Planar Akiko chip, Blittersoft claim that the new emulator provides a very high level of compatibility with CD³² games. "We tested games such as *Microcosm* and *James Pond* and all worked without problems," claimed Blittersoft's Paul Lesurf.

# WORKBENCH 3.1 SPECIAL OFFER

**A**t *Amiga Format* we're often guilty of suggesting, quite firmly at times, that Amiga owners should upgrade their Operating System. Well, now we're putting our money where our mouth is, so to speak.

*Amiga Format*, in conjunction with Blittersoft, are offering readers the chance to upgrade to OS 3.1 at £10 off the usual price.

Each package contains the new Kickstart ROM, six disks, plus three hefty manuals explaining all the finer points of Workbench, *AmigaDOS* and *ARexx*.

But just why should you upgrade? For starters, it will make your machine fully compatible with new software: most programs are now coded with Kickstart 3.1 in mind, and simply won't run on machines with an earlier version of the operating system.

OS 3.1 also offers CD-ROM support, and although you still cannot boot from CD-ROM (shame on you, Commodore), you are now able to read data from any ISO9660 standard CD-ROM. And

Support for datatypes and 24-bit graphics cards are only a small taster of what Workbench 3.1 has to offer.

although unmentioned in any of the manuals, Operating System 3.1 provides Akiko emulation (primarily of use to any A4000 owners who want to run CD³² games).

The new 3.1 Operating System also provides a host of advanced new features including:
**Localisation** – Provides you with foreign language support for any compatible applications.
**Improved Preferences** – Enhanced preferences editors, including an advanced palette requester.
**PostScript Printing** – OS 3.1 now supports direct PostScript printing.
**Built-in *CrossDOS*** – Allows any Amiga to read and write to 720K MS-DOS disks (or 1.44Mb MS-DOS disks with a high-density drive).
**Datatypes** – A common system for extending the file-handling capabilities of utilities, simply by adding the necessary files.
**Multiview** – Used to display any sound, graphic or animation file currently supported by Datatypes.
**AmigaGuide** – This provides Hypertext-based on-line help by means of a common system.

### OS3.1 PRICE GUIDE

| OS 3.1 VERSIONS | USUAL PRICE | PROMOTIONAL PRICE |
|---|---|---|
| A500 & A500+ | £84.95 + £5.00 P&P | £74.95 + £5.00 P&P |
| A1500 & A2000 | £84.95 + £5.00 P&P | £74.95 + £5.00 P&P |
| A3000 & A3000T | £94.95 + £5.00 P&P | £84.95 + £5.00 P&P |
| A4000 & A4000T | £94.95 + £5.00 P&P | £84.95 + £5.00 P&P |

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☐ A3000 or A3000T ..........................................£89.95 (inc P&P)
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# How the cover

Ever wondered how we put together the covers for the world's biggest Amiga mag? Now's your chance to find out with **Nick Veitch** and **Craig Collins**.

The model of the ship was fairly simple to construct. It is essentially a block of text that has been bevelled and extruded. The tricky part was individually mapping the front, bevel and sides of the object, but the result is worth it.

This lensflare is to represent the beam being fired from the ship and more or less matches the one on the receiving end.

This lensflare is to represent the blast from the laser, fired from the pixel ship. The laser beam itself is a bit subdued, but it gets lost behind the disks anyway.

By using different surface attributes for the rear part of the tail, it appears as though the dinosaur is being turned into a wireframe object. Changing surface attributes is very easy using *Pixel 3D* or *Lightwave*.

By using the depth of field options in the rendering software, a realistic blurred foreground effect can be easily achieved.

# was created

The clouds are part of the excellent object collection from the 24Bit Club, reviewed on page 100 of this issue.

The spaceship helps to show the scale of the big ship. Little touches like this might seem superfluous, but are important in conveying an impression of size.

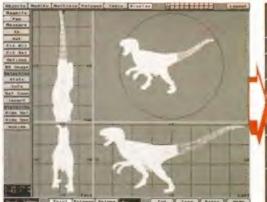Objects are not made purely by creating polygons. More often than not the surface characteristics are more important. For this dinosaur's skin, IFF maps have been used to convey a reptile appearance with a combination of map types.

Lensflare is a very wonderful thing. *Lightwave* enables you to manipulate lights for virtually every occasion, like this jet blast here. Notice how a small part of the glow obscures the object – a small but neat effect.

To save memory, this is actually the same model of the raptor, cloned, sized, rotated and with different surface attributes. A light source has been placed inside it to look like the creature has been zapped.

The ground object has not been smoothed, to give a slightly jagged, rocky look. A 256-colour map provides the rocky texture.

S
o, you want to know how we go about creating a cover then. Well, the process actually starts with an idea of what we want to say on the cover. This is a bit harder than it sounds, because everybody has really terrible ideas except for me. Funnily enough everybody else says the same. Eventually we have an idea, and it's up to Sue and Frank to sort it out. This isn't quite such a chore when we use an illustration on the cover, because they just call up some other poor sap and get him to do the work. This month, Craig Collins was suckered into doing it, and below you can find out exactly how he accomplished this task…

## 12 STEPS TO A COVER, BY CRAIG COLLINS



**1** The two main models to be built for the cover were a raptor dinosaur and the Pixel 3D ship. I had finished the raptor model just before I received the *Amiga Format* commission for this cover image. The model was built mainly from spline patches which are ideal for organic modelling. This was surface mapped with some IFFs to create the skin effect and then I added bones in *Lightwave* to make it easy to pose and reposition the figure if necessary (bones are very useful for stills as well as animations).



**2** The Pixel 3D ship was made from a chunky, readable font. The extruded sides and parts of the front faces were slightly modified to make it look more like a spaceship. A small docking bay was created in the letter X to further the spaceship idea. The bevel, face and side polygons were individually surface mapped to make the face polygons stand out.



**3** A diffusion map for the raptor was created using Forge and a few textures. Forge is a texture generation system from the same people who did the Essence textures for *Imagine*, so the results are pretty good. The textures are rendered as flat IFFs, which can then be mapped on objects in whatever rendering system you have. These textures were rendered greyscale at 512x512 resolution.



**4** I used a spray can in *DPaint 4* to add rough markings and a slight dirt look. This should be done in 256 greyscale for a smoother graduation between shades but because I'm 24-bit boardless I made do with 16 colours. A paint package is essential for creating decent models, because you need to use something for manipulating the IFFs that you then map on as surface characteristics.

## SOFTWARE:

If you want to make a cover for *Amiga Format*, you need some top-rated software. This is just a small selection of the rendering and associated software used by *Amiga Format*. You should also check out the round-up on page 117, which deals with image processing in more depth.

### IMAGINE 3.0

If you are ray-tracing on a budget there is nothing to touch this software. It is an upgrade to the greatest giveaway of all time – the AF53 *Imagine 2* Coverdisk. It has many of the same features as *Lightwave*, and some people actually prefer it. Check out Meridian's special offer on 081-543 3500.

The excellent *Imagine 3.0* shares many of the ray-tracing features of *Lightwave*.

### LIGHTWAVE 3.5

The ultimate in ultimate software. There is nothing anywhere that compares to the power and ease of use of this software. If you can afford it, get it, but beware of the system requirements (you need at least 6Mb, and an '030 processor is highly recommended). *Lightwave* is available from Premier Vision on 071-721 7050 for £449.

### IMAGINE 2.0

Our AF53 Coverdisk is no longer available, but if you do happen upon a copy at a show or in some junk shop, it is well worth considering. Although render speeds are slow compared to *Imagine 3.0* and *Lightwave*, it doesn't require huge amounts of RAM (you can run it reasonably in 2Mb of RAM, or 1Mb if you are really desperate).

### PIXEL 3D PRO

Look no further than this Coverdisk for an excellent object manipulation and conversion utility. Some of the advanced editing functions in this software are not available in any other modelling system.

The *Pixel 3D Pro* Coverdisk has many unique advanced editing functions.

**5** The raptor, Pixel 3D ship and the camera were positioned in the Layout editor. A small star-filtered lightsource was placed at the tip of the tail. The tail surface was made into an outline to give the illusion the dinosaur is being converted by a blast from the Pixel 3D ship. A smooth orange gradient was created in the effects menu to act as a temporary backdrop (the real picture uses an imported IFF as a backdrop).

**6** For the foreground a heavily subdivided rectangular plane was extruded into shape with the Magnet tool in *Lightwave*. The same was done for the rocky outcrops in the background. A high resolution 24-bit texture map was used as a surface map. I left smoothing off because I wanted the rocks to be sharp and uneven.

**9** After the modelling, mapping and placing of the objects in the scene I then concentrated on lighting my world. A dozen point lightsources were spread around the ship, two for the X docking bay, a large flare for the laser blast and two more for the engine flares. The Pixel ship and raptor were also lit with the usual Key, Fill and Backlights. A shadowlamp was assigned to the backlights to cast the shadow from the sun.

**10** Further objects were added to the scene, like the laser beam, and slight adjustments made to the present models until I was satisfied. Most attention was made to the top, bottom and right of the scene because the *Amiga Format* Coverdisks hide the lower left side of the picture. Maps were altered slightly following test renders.

## CRAIG COLLINS

If you're particularly interested in 3D graphics, or if you read our very fine sister publication *Amiga Shopper*, you have probably seen some of Craig's work before. Apart from the powerful *Imagine* animations he created (notably *The Last Stand On Hoth* and the CD[32] *Mean Machines* sequence) and his recent cover artwork for *Amiga Shopper*, he has also produced an excellent video of his work, which is reviewed on page 128 of this issue.

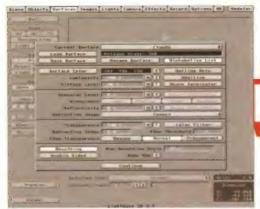You will probably be surprised to find that Craig creates all his work on a humble A2000. Admittedly it's a humble A2000 with 16Mb of RAM on board, but he only has a 52Mb hard disk and at the moment he doesn't even have a 24-bit graphics card.

Craig is an animator par excellence, but he doesn't rely on his animation skills for a living. Arming himself with a few A-levels and eight O-levels, Craig works part-time in a warehouse, spending every other waking moment creating stunning animations on his Amiga.

His early adult life was spent (like everyone's surely) playing A500 games. Then someone showed him BytebyByte's *Sculpt Animate 4D*. Says Craig: "I fell in love with 3D. Then I started buying more equipment – faster accelerator cards, more memory and I moved up to an A2000. On the software front I got *TurboSilver*."

What does Craig want to do in the future? "Hopefully I'll be able to make animating my full time profession. I might even consider moving over to the States, although I'd prefer to stay in the UK. At the moment I am trying to get enough cash together to build up my system – by doing things like company logos or perhaps freelance work for CD[32] games companies."

If you would like to commission Craig, contact him through *Amiga Format* at 30 Monmouth Street, Bath, BA1 2BW.
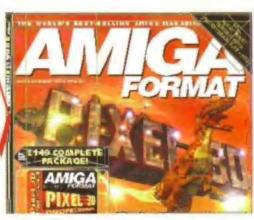
**7** The clouds were borrowed from the 24Bit Club's *Lightwave* collection because time constraints did not allow me to come up with my own (I've only been using *Lightwave* for a couple of months). The texture parameters were altered to give a sunset look. The Zenith and sky colours gave me a smooth gradient between dark orange to a warm yellow. A slight gradient squeeze was used to push the yellow towards the horizon to further exaggerate the sunset look.
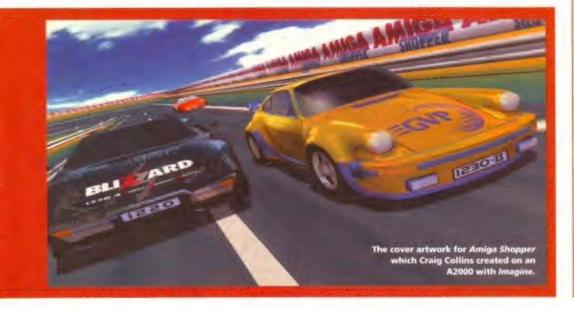


**8** This is a test picture of the sky and clouds. There's also a small spaceship to give a sense of immense size and scale to the Pixel 3D ship. It also gave a good reason to have the X docking bay. A point lightsource acts as a sun. This was given a high intensity setting with just a hint of central glow flare. I'm no cheesy lensflare abuser. Some of the lensflare effects you see are just outrageous. The theoretical camera involved must have had Vaseline smeared all over the lens.



**11** In the Camera menu I selected high resolution, medium aliasing and depth of field. The raptor is put into more focus slightly to separate it from the Pixel ship and give a bit of distance. Due to memory constraints all my 24-bit maps were reduced to 256 colours and I chopped 10,000 polygons from the models. Beware, *Lightwave* high and print resolutions demand a lot of memory. This was unbeknown to me until then. The scene was rendered 1280x960 resolution, taking about seven hours to complete.

**12** Finally the picture was taken through *ADPro* and saved out as a JPEG. Then it was modemed at great speed to *AF* Towers, where the wonderful art department, who we respect and admire, imported it on to their Macs and covered up the picture with silly disk labels and all that rubbish. As a final touch, the publisher came along and told us it was all wrong, and wrote about 3,000 words on top of the image to obscure everything. As usual, his version of the cover got lost on the way to the printers…



The cover artwork for *Amiga Shopper* which Craig Collins created on an A2000 with *Imagine*.

## PIXEL 3D PRO 2
Even better than *Pixel 3D Pro* is this very latest version of our Coverdisk program, especially if you have an AGA machine. But don't waste time reading about it here, turn to the full review on page 100.

## ART DEPARTMENT PROFESSIONAL 2.5
The definitive image processing software is now being seriously challenged for top spot by *ImageFX*, but there is no substitute if you want to do high-quality, high-end processing. The new interface takes a bit of getting used to, but it is faster in the end. It's priced between £100 and £130 from various sources. Shop around and you may get a bargain.



*ADPro is being challenged by ImageFX, but for many people remains the top image processor.*

## PROCONTROL
The companion to *ADPro* is very useful if you need to batch process or convert a large number of files. It requires *ADPro* to work and comes with a number of scripts to make life easy for you. It's available from Meridian on 081-543 3500, priced £79.

## IMAGEMASTER RT
*Imagemaster* from Black Belt is hard to get hold of these days, and we have no current UK price. But it is a worthy alternative to *ADPro*. The advantage is a real-time display on which you can select areas to edit.

## IMAGEFX 1.5
Another real-time image processing package, *ImageFX* enables the user to process areas on the screen. This makes many tasks a lot easier, but tends to slow things down. If you are using 24-bit images, it is only worthwhile using these modes in conjunction with a 24-bit card such as the Spectrum (for which there is a special version of the software). *ImageFX* costs £179 from Silica on 081-309 1111.

## PERSONAL PAINT
The Italian option is Cloanto's *Personal Paint*. Not only is it a reasonably decent paint package, it also includes a lot of image processing features, so this may be the best bet if you are starting from scratch and don't have much of a budget. Be sure to get the newest version of the program which has 24-bit and JPEG support. *PPaint* costs £69.95 from Ramiga on 0690 770304.

## CROSSDOS
This is included in Workbench 2.04 and above. It gives you the ability to read and write PC format disks, which is invaluable for sending finished artwork to printers, because most of them think that Amiga is the last letter of the greek alphabet.

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Get the most out of your Amiga with *Amiga Format*'s series of specially-created videos. There are nine videos in the collection and they are all designed with your needs in mind and compiled and presented by experts. They are the most up-to-date and information-packed Amiga videos available in the UK.

A special twin-pack comprising both **NORTH & SOUTH** (*AF37* 84%) and **F16 COMBAT PILOT** (*AF3* FG94%): *North & South* – a cartoon-like simulation of the American Civil War – is a classic one or two-player strategy/action game while *F16 Combat Pilot* is one of the most realistic flight and combat simulators ever.

**YO! JOE!** (*AF50* FG91%): This game really captivated us. OK it's a platform game but how many of those do we describe as 'truly great', 'a perfect example of the genre' and 'a complete stunner'? The reviewer even offered to buy anyone who didn't like the game a pint, and he's never had to.

**TERMINATOR 2 – THE ARCADE GAME** (*AF55* 73%): Playing a terminator, you're up against Skynet and Cyberdyne in shoot-em-up city. *Terminator 2* is based on the coin-op – don't ever show this game to anyone who claims there is too much violence in computer games. As we said when we reviewed it: 'A wholly satisfying shoot-em-up'.

## Plus ALL THIS!

**NEW SIX-MONTHLY DIRECT DEBIT OPTION**

NOVEMBER 1994

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# SCREEN PLAY

# UFO
## ENEMY UNKNOWN

**Save the world from alien invasion**     p56

## AMIGA FORMAT

### CHRISTMAS CHEER

As we head toward Christmas, Amiga games players have every reason for optimism. Despite the scaremongering that fewer Amiga games are being produced due to Commodore's situation, there are loads of releases due in the next few months. Software houses know that the Amiga sells more games than any other machine and they also know that the Amiga has the largest user base.

Virgin have a busy run-up to the festive season – we preview *Overlord*, *The Lost Eden* and Disney titles *The Lion King* and *Aladdin*. And CD³² owners can rejoice, Acid Software have produced a *Defender* for the Nineties, *Guardian*.

The most eagerly-awaited console conversion for months arrived at *AF* this month, but can *FIFA International Soccer* takes on its legendary Sensible counterpart? Classic golf game *PGA Tour* also re-appears, while Microprose's well-overdue *UFO: Enemy Unknown* finally shows its colours.

Current number one, *On The Ball: World Cup Edition* makes its League entrance and we have a football management game, *Club Football*. If this weren't enough, there are five Gold-rated products spread between the re-release and CD³² pages.

### AMIGA FORMAT'S REVIEW POLICY

Every month we scour the world's software houses for the latest and greatest Amiga games. We try to ensure we keep you as up-to-date as possible, and we'll stop at nothing to bring you the best, definitive, no-nonsense reviews of the games that matter.

### WHAT OUR REVIEW SCORES MEAN

**90+%**

The crème de la crème of Amiga games. Only the very best, most playable and original games are awarded an *Amiga Format Gold* – the most highly-prized rating there is.

**80-89%**

These games are considered to be very good, but due to minor flaws are not the finest examples of their genre.

**70-79%**

These are good games which are worth buying, especially if you have a special interest in a certain game type.

**60-69%**

Average releases with limited gameplay and appeal. Games in this category tend to have significant flaws.

**50-59%**

Below average games like this are unlikely to impress your mates or your wallet. Try to avoid if you can.

**40-49%**

Overwhelmingly poor quality games with major flaws and appalling gameplay. They're an embarrassment.

**Less than 40%**

The lowest of the low. Don't even consider borrowing 'em.

# COMING AT

## Work in progress

# VIRGIN TERRITORY

**A whole parcel of goodies are coming your way from Virgin. Just in time for the festive season...**

L ooks like there's going to be a cornucopia of fabulous feisty frolicsome festive family fun for everyone and anyone remotely interested in Amiga games this Christmas. Virgin are playing at being Father Christmas with an Amiga goodie bag guaranteed to rat-at-at-at your ratats. (Eh? – Ed.)

First out of the sack is the game of the cartoon of the animated film, *Aladdin*.

Nasty fiendish piece of work, Jafar, has kidnapped Princess Jasmine. You take on the eponymous role of her potential saviour. Armed only with a sword, you've got to fight baddies, climb ropes, make great bounding leaps of faith, jump over fires, traverse various obstacles, collect gems and hearts and earn top score bonuses.

The whole *AF* team have been taking turns at the games writers' desks to see if they could improve their score on the one level demo we were sent by Virgin.

If you were to take a dispassionate look at the game, you'd be hard pushed to say that it was anything more than standard platform fare. But that doesn't take into account the beautiful animation and use of key scenes from the film to build a spellbinding atmosphere.

What's more, it knocks the spots off of the console versions for look, feel and playability. So, just like the film, we're predicting that *Aladdin* will gross big bucks and be among the top 10 best sellers this Christmas.

Second out of the goodie bag is *Overlord*. A war-strategy flight sim based on Operation Overlord – the allied military campaign which eventually liberated mainland Europe from the Nazis in World War 2.

It's radically different in looks from its PC counterpart, but don't let that put you off. What's important here is the meat in the gameplay. The research that's gone into the motion of the planes and the historically accurate locations of the ground targets is staggering.

All of the airfields are based on wartime reconnaissance photographs obtained from the national archive at Keele University. Historical and geographical accuracy is maintained throughout the game, adding to the atmosphere immensely.

The gameplay consists of various missions assigned to the player. The missions, whether air,



**ALADDIN:** Rub Aladdin up the wrong way and he gets very upset. Genie, on the other hand, finds it gives him a sense of release.
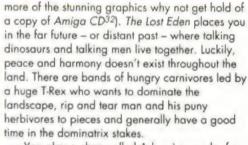
land or sea based, also dictate the type of plane you fly – Typhoon, Mustang or Spitfire.

Each of the planes handles differently, so it's a skill in itself to master the requisite manoeuvres required for each of the mission styles. An innovative and helpful view from the cockpit lets you lock on to targets and helps make the game run quicker. The motion of the graphics are similar to that found on old film footage of dogfights. One to look forward to for war fanatics, flight sim fans and interested parties all round.

With a slight time shift and a lot of imagination, you could envisage some sort of link between *Overlord* and *The Lost Eden*. Well, both games are being published by Virgin, so that's link enough for this time in the morning.

*The Lost Eden* will be released for the CD32 (if you want to find out more about the game and see

more of the stunning graphics why not get hold of a copy of *Amiga CD32*). *The Lost Eden* places you in the far future – or distant past – where talking dinosaurs and talking men live together. Luckily, peace and harmony doesn't exist throughout the land. There are bands of hungry carnivores led by a huge T-Rex who wants to dominate the landscape, rip and tear man and his puny herbivores to pieces and generally have a good time in the dominatrix stakes.

You play a chap called Adam in search of a solution to the carnivorous dinosaur problem. He can only find this solution by seeking out the hidden knowledge inside some mystical citadels. Then and only then will he be able to build citadels to defend himself and his charges from the attention of the T-Rex boys.

*The Lost Eden* is an adventure strategy game by French development team Cryo of *KGB* fame. We've only seen some screenshots so far, but what's been viewed is more than impressive. The dinosaurs and characters who Adam meets, fights and makes friends with are rendered in 3D and they're almost photo-realistic. There's no firm release date yet, but look for more news nearer December.

This month witnesses the general release of *The Lion King*. Disney's epic yarn about Simba, a prematurely orphaned lion cub destined to become king of all that he surveys.

The game follows the plot of the film, featuring Timon The Meerkat and Pumbaa The Warthog.

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# TRACTIONS



RABITT AT 5 O'CLOCK, RANGE 27 MILES

OVERLORD: Cannon Fodder 2 and Overlord will mean that fans of blood/thirsty war ...

For this interactive adventure, the Disney engineers drew around 2,000 new frames of animation and adapted the sound track from the film.

The game hinges on the building up of the relationship between Simba, Timon and Pumbaa and for the final showdown with Scar. Disney hope that this relationship will emotionally involve the player. Whether it does or not still remains to be seen. Expect a full review of *The Lion King* soon.

Last, but by no means least, *Cannon Fodder 2* is scheduled for release in November. Stuart Campbell of *Amiga Power* infamy is the man responsible for the design of many of the levels of

this game. So expect no quarter spared when we finally get the chance to review it.

If you haven't heard of *Cannon Fodder*, then you're probably dead. But just in case there are any dead people reading this, the player controls up to six little blokes who can be armed with rocket launchers, grenades, guns and various other weapons.

Tactics, strategy and some lateral thinking are all called upon to successfully battle your way through 72 levels of mayhem, carnage and extreme violence. And remember, 'War has never been so much fun'. *Cannon Fodder 2* will get a full review next issue. Probably.

**THE LION KING:** Everyone at Future Publishing got to see the film of *The Lion King* before it went on general release and we haven't stopped going 'Aaaah' ever since. Hopefully the game, which is one of the many Virgin/Disney releases, will be just as good.

**THE LOST EDEN:** The two pictures above are from this lovely-looking dino-based epic coming soon from Virgin.

## ALADDIN
## THE LOST EDEN (CD32)
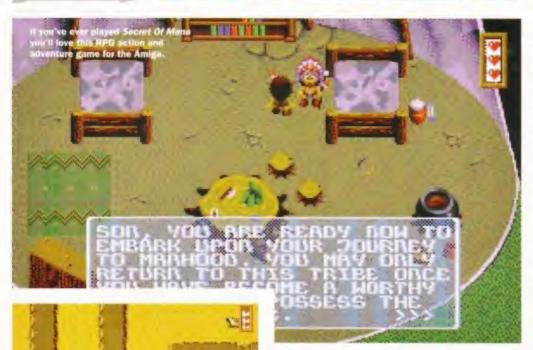## THE LION KING
## CANNON FODDER 2

**FROM:** Virgin,
338A Ladbroke Grove,
London W10 5AH.
**TELEPHONE:** 081-960 2255
**VERSIONS:** A500, A600, A1200
**RELEASE DATE:** Nov/Dec
**DEVELOPERS:** Various
**PRICE:** £TBA

# Work in progress LEGENDS

If you've ever played *Secret Of Mana* you'll love this RPG action and adventure game for the Amiga.

SOR, YOU ARE READY NOW TO EMBARK UPON YOUR JOURNEY TO MANHOOD. YOU MAY ONLY RETURN TO THIS TRIBE ONCE YOU HAVE BECOME A WORTHY POSSESS THE >>>

*Legend* promises to soften the heart of even the most hardened RPG hater.

H ave you ever heard of the action RPG games *Zelda* and *Secret Of Mana*? Probably not, but anyway, they're Nintendo games which mix the traditions of role-playing with lots of scuttling around, killing baddies and picking things up. In other words, games that even the most fanatical haters of the standard RPG fare can enjoy. Krisalis have spotted this gap in the Amiga market and are currently working on a game called *Legends* which liberally combines folklore with zany humour.

Tim James of Krisalis explains: "The game is obviously inspired by *Zelda* and games of that ilk and as you would expect of a game called *Legends*, there is a large amount of folklore, albeit light-hearted surrounding the geographical locations depicted within the game. In the Pyramids level you will find a space invaders machine which has been beamed back by troublesome aliens and you can play an Egyptian version of space invaders with scorpions and weird hieroglyphics dancing across the sky."

Other areas to explore include the times of King Arthur and the American Indians. At one point, Bullseye's Jim Bowen turns up suggesting that things are literally 'super', 'smashing' and indeed, 'lovely'. *Legends* is shaping up very nicely and let's hope that the final version reflects the progress made.
* Krisalis have released a *Manchester United Premier League Champions* data disk with all the updated transfers and kit details. It's available now and costs £9.99.

## LEGENDS
FROM: Krisalis, 47 Mowbray, Rotherham, South Yorks S60 2HD.
TELEPHONE: 0739 372290
VERSIONS: A1200 and CD32
RELEASE DATE: January 1995
DEVELOPERS: In-house
PRICE: £TBA

# PINBALL ILLUSIONS

All of the tables are based on real-life arcade versions, Judge Dredd is just one of them.

balls were.
Thankfully, *Illusions* is AGA only and can be flipped between Hi and Lo-Res. The Hi-Res display lets you see most of the table and thus, all of the balls. This, we have been assured, makes the multiball feature completely useable. We'll be reviewing the game next ish. Look forward to it.

T he people responsible for the successful *Pinball Dreams* and *Pinball Fantasies* are 21st Century, and now there's going to be a third title to turn what was a duo into a trilogy. *Pinball Illusions* improves on all aspects of the previous two games.

Firstly, it will incorporate multiball. The inclusion of this option is 21st Century's answer to one of the most requested features, absent from the other two games. The only problem with multiball is that it's incompatible with the two-screen-high table size. Half the time, you wouldn't be able to see where the

## PINBALL ILLUSIONS
FROM: 21st Century, Westbrook Street, Blewbury, Oxfordshire OX11 9QB.
TELEPHONE: 0235 851852
VERSIONS: A1200, CD32
RELEASE DATE: October
DEVELOPERS: In-house
PRICE: £TBA

# PREMIER MANAGER 3

Will the new *Premier Manager* be as popular as the second game?

A nd how long has *Premier Manager 2* been in the charts? About 20 times as long as that Wet Wet Wet song. Gremlin will be hoping that the latest incarnation, *Premier Manager 3* performs with similar pomp.

New features include a European transfer market and an icon-based isometric representation of matches so you can see exactly how your team performs on the day. You're even given an assistant manager to browbeat, sorry, help you out. It should hit the shelves, and the charts, shortly.

## PREMIER MANAGER 3
FROM: Gremlin Interactive, Carver House, Carver Street, Sheffield S1 4FS.
TELEPHONE: 0742 753423
VERSIONS: A1200
RELEASE DATE: November
DEVELOPERS: In-house
PRICE: £25.99

# CHARTS

**Welcome to *Amiga Format*'s monthly round-up of the hottest Amiga games around.**

ELSPA

## TOP 10 BUDGET GAMES

| | | |
|---|---|---|
| 1. | Arcade Pool (Team 17) | FG94% |
| 2. | Sim City Classic (Hit Squad) | 83% |
| 3. | Batman Returns (Gametek) | 48% |
| 4. | Champ Man: End of Season (Domark) | 65% |
| 5. | Battle Of Britain (Kixx) | Not re-reviewed |
| 6. | Populous 2 (Hit Squad) | FG90% |
| 7. | Faldo's Champ Golf (Grandslam) | FG90% |
| 8. | Street Fighter II (Kixx) | 9/10 |
| 9. | Body Blows (Team 17) | 87% |
| 10. | Monkey Island (Kixx) | 9/10 |

**ARCADE POOL:** Top of the budget chart for months, this one's on a roll.

**BATMAN RETURNS:** Gotham City's finest makes the Budget Chart top three.

**SIM CITY:** Build the city of your dreams.

## Top 10 A1200

| | | |
|---|---|---|
| 1. | On The Ball: WCE (Ascon) | 80% |
| 2. | Banshee (Core Design) | FG90% |
| 3. | Jurassic Park (Ocean) | 70% |
| 4. | Civilization (Kompart) | FG95% |
| 5. | Kick Off 3 (Anco) | 79% |
| 6. | Alien Breed 2 (Team 17) | 80% |
| 7. | Brutal Football (Millenium) | 79% |
| 8. | Heimdall 2 (Core Design) | 81% |
| 9. | Detroit (Impressions) | 69% |
| 10. | Ryder Cup Golf (Ocean) | FG91% |

## Top 10 CD32

| | | |
|---|---|---|
| 1. | Zool 2 (Gremlin Graphics) | FG90% |
| 2. | Frontier: Elite 2 (Gametek) | FG91% |
| 3. | Humans 1&2 (Gametek) | 78% |
| 4. | Simon The Sorcerer (Ad Soft) | 67% |
| 5. | Nigel Mansell (Gremlin) | 73% |
| 6. | Banshee (Core Design) | FG90% |
| 7. | Heimdall 2 (Core Design) | 81% |
| 8. | Liberation (Mindscape) | FG91% |
| 9. | Ult Body Blows (Team 17) | FG90% |
| 10. | Gunship 2000 (Microprose) | FG92% |

## IN THE MAKING...

### NOVEMBER

| | |
|---|---|
| Alien Breed 2: Tower Assault (Team 17) | Completely revamped *Alien Breed* |
| Baldy (Mindscape) | God game involving folk bereft of hair |
| Battle Isle 2 AGA (Kompart/Blue Byte) | Get tanked up again |
| Cannon Fodder 2 (Virgin) | More mouse-controlled mayhem |
| Football Glory (Black Legend) | *Sensible Soccer* wannabe |
| King-Pin (Team 17) | Beat the bowling alley blues |
| Kingdoms Of Germany (Krisalis) | Much improved sequel to *Vikings* |
| KTM Motocross (Renegade) | Motorbike, mud, thrills and spills |
| Jungle Strike CD32 (Ocean) | Helicopters work to rule in leafy environment |
| NHL Hockey (Ocean) | Monstrously playable cart gets Amiga conversion |
| Pinball Illusions (21st Century) | *Fantasies* follow-up with multiball |
| Rise Of The Robots (Mirage) | Surely not due for release yet? |
| Sensible Golf (Virgin) | Top-down, check-trousered extravaganza |
| Sensible World Of Soccer (Renegade) | The be all and end all? |
| Super Loopz (Audiogenic) | *Pipemania*-esque puzzledom |

### DECEMBER

| | |
|---|---|
| Cyberwar CD32 (SCI) | Virtually virtual reality. 3D shoot-em-up |
| Death Masque (Apache) | Blood addled first-person perspective shoot-em-up |
| Lemmings 3 (Psygnosis) | Can DMA improve on *Lemmings 2*? |
| Mega Race CD32 (Mindscape) | Looks great, but will it have the drive? |
| Mr Blobby (Millenium) | It may tickle you pink. It may not |
| Spherical Worlds (Black Legend) | Top-down view shoot-em-up |
| Skeleton Krew (Core Design) | 3D isometric-perspective adventure |
| The Big End (The Hidden) | Another isometric-viewed racing game |
| Voyages Of Discovery (Black Legend) | Historical trade sim and strategy |

### JANUARY

| | |
|---|---|
| Aladdin AGA (Virgin) | Adventures on carpets |
| Overlord (Virgin) | Fly the skies in World War 2 |
| Powerdrive (US Gold) | Isometric rally racing sim |
| Shaq Fu (Ocean) | Basketballer beat-em-up |
| Skitchin (Ocean) | *Road Rash* on rollerskates |
| World Cup Golf (US Gold) | Multi-format walk in the country |

## THIS MONTH'S TOP 30 A500/A600



The top five games of the month: *On The Ball: World Cup Edition, Tactical Manager, Frontier: Elite 2, Sensible Soccer International* and *Lemmings 2* (not necessarily in that order). Football seems to be the most popular genre of game at the moment. But then again, when isn't it?

| | | | | |
|---|---|---|---|---|
| 1. | (-) | New | On The Ball: World Cup Edition (Ascon UK) | 80% |
| 2. | (3) | Up | Tactical Manager (Black Legend) | 78% |
| 3. | (10) | Up | Frontier: Elite 2 (Gametek) | FG90% |
| 4. | (1) | Down | Sensible Soccer International (Renegade) | FG93% |
| 5. | (-) | Re | Lemmings 2 (Psygnosis) | FG94% |
| 6. | (2) | Down | Kick Off 3 (Anco) | 79% |
| 7. | (4) | Down | Premier Manager 2 (Gremlin Graphics) | 80% |
| 8. | (8) | Same | Cannon Fodder (Virgin) | FG95% |
| 9. | (6) | Down | World Cup Year '94 (Empire) | FG94% |
| 10. | (-) | Re | Brutal Football (Millenium) | 78% |
| 11. | (11) | Same | The Settlers (Blue Byte) | FG94% |
| 12. | (9) | Down | K240 (Gremlin Graphics) | 84% |
| 13. | (24) | Up | Jurassic Park (Ocean) | 70% |
| 14. | (18) | Up | Graham Gooch Cricket (Audiogenic) | 78% |
| 15. | (19) | Up | Beneath A Steel Sky (Virgin) | FG94% |
| 16. | (-) | Re | European Champions (Ocean) | 69% |
| 17. | (6) | Down | World Cup USA '94 (US Gold) | 48% |
| 18. | (23) | Up | Skidmarks (Acid Software) | FG90% |
| 19. | (13) | Down | A-Train (Hit Squad) | 84% |
| 20. | (20) | Same | Zool 2 (Gremlin) | FG93% |
| 21. | (15) | Down | Starlord (Microprose) | Not reviewed |
| 22. | (16) | Down | Empire Soccer (Empire) | 88% |
| 23. | (17) | Down | Wild Cup Soccer (Millenium) | Not reviewed |
| 24. | (12) | Down | Valhalla (Vulcan Software) | 23% |
| 25. | (22) | Down | The Lotus Trilogy (Gremlin Graphics) | FG90% |
| 26. | (5) | Down | Sensible Soccer 92/93 (Renegade) | 80% |
| 27. | (14) | Down | MUPLC (Krisalis) | 81% |
| 28. | (-) | New | Detroit (Impressions) | 69% |
| 29. | (-) | Re | Graham Gooch's Second Innings (Audiogenic) | 80% |
| 30. | (-) | New | Ishar 3 (Daze) | 72% |

# FIFA INTERNATIO



*FIFA International Soccer* is big business. Sponsors proliferate, yet this doesn't reflect on the price of the game. Go on all-out attack – it's endorsed by the Adidas Predator.



The white flash denotes the player in progression while the one outlined in red is, as you might expect, the nearest challenger. Note the poor chap writhing on the ground.



Coverage relates to how far the three facets of your team steal forward.



Goals go in and verily, the scoreboard doth light up in a startling variety of colours.

## EA's massive-selling footie sim is here. But is it in the same league as *Sensi*?

S o here it is then. The football game that many say is superior to *Sensible Soccer*, the game that sold truckloads on the SNES and Mega Drive, the game with the 'unique' isometric, looks-a-bit-like-it's-on-telly view. And boy have we been looking forward to seeing it.

So we load up the three disks – it takes an age – then after all the messing about, we instead install it on to the hard drive. That's better, not much waiting around now. A quick blast through the manual just to check out a few details and we're off. England verses Wales, Bugs clutched in perspiring palms, tension almost unbearable.

Just a minute, what the bloody hell is going on. "I don't know what I'm doing," cries the Tall Scotsman McGill.

"Neither do I," retorts your correspondent, with some anguish. And then: "Brilliant goal Steve," exclaims the Scot, "the way you produced that back flick, overhead kick and 40 yard volley into the back of the net was outstanding." "Ahem, er, yes, it was pretty clever wasn't it," I return, with a distinct lack of conviction. Yes, my first impression of *FIFA International Soccer* is that it's a mite confusing.

### At the end of the day

But feast your eyes on those big sprites. And those hoardings give a real feel for the game. Hey, and if you choose all-out attack, you find to your delight that you are sponsored by Adidas Predator football boots. This game is BIG business.

As a console game *FIFA* is excellent. The sprites are huge and superbly animated and because you have a multi-button joypad you can utilise all manner of tactics to pass the

ball, hoof it down the pitch and shoot. Although the graphics aren't as good as the other versions, the Amiga *FIFA* is still most personable.

No, the problems arise when you actually get down and play the game with your one-button joystick, which, of course, the majority of Amiga games players have. Keeping possession of the ball isn't easy for a start – it's reminiscent of playground football with crowds of players chasing after the ball.

Accurate passing is also tough – you can't knock the ball straight to a teammate's feet using a particular joystick manoeuvre; and because you have to hold the fire button and then release, judging the pace of the pass takes plenty of practice. Which brings me nicely to shooting. Running towards the goal, your finger firmly pressed on the fire

# NAL SOCCER

button, you're ready to unleash a howitzer. Occasionally the ball flies into the onion bag; other times it seems you are just passing the ball to the keeper. It takes practice.
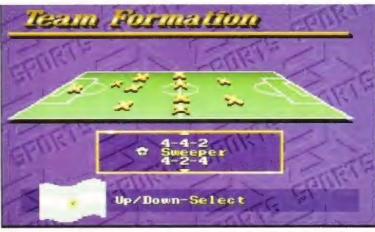
Yet FIFA can be spectacular and you can perform the most dazzling moves of any Amiga football game. Backheels are a delight, diving headers splendid and overhead kicks simply glowing, but perfecting them is a mountainous challenge.

The game is best played with a joypad or two-button joystick where you can use one button to slog the ball upfield, not an option with only one button to play with.

### It's only a game

Options? This game is blessed with them ranging from different competitions to varying formations and strategies. Not wanting to bore with explicit detail, it's suffice to say that the most interesting are the game types where you can play Action or Simulation. In Simulation, your players tire during the game affecting their passing and shooting ability. Also noteworthy is the option for the goalkeepers to be manually or computer controlled.

So what can FIFA offer to the Amiga footie game fan; the one who already has Sensible Soccer, MUPLC, Empire Soccer and the rest? Well, it looks superb, although the scrolling isn't quite silky smooth, and the ball tends to drift off screen at times. The sound is tinny – the chants are nicked from Sheffield Wednesday and the ground reverberates to the speeded-up sound of: 'We love you Wednesday, we do,' 'Tricky Trev's barmy army'

The finest-looking formation has to be the long ball – three huge arrows denote this tactic. The more subtle among us choose the Christmas Tree formation. But not here.

All the teams have differing abilities and Tom Stone kindly explains the merits of the participating squads. If you want real strength, plump for the Germans.

and that horrible Italian opera tune that they hum. Ho hum.

You can't play a quick passing game like in, say, Sensi, nor does it have the speed and quirkiness of Empire Soccer. No FIFA is a game that has to be learned, a game that you must persevere with to get the best out of because, for all its undeniable visual charm, the gameplay is a struggle to come to terms with. Despite this misgiving, it can be a thrilling ride, particularly when you manage an outrageous goal and glance smugly toward your aghast opponent.

FIFA makes the top 10 Amiga football games. It won't be everyone's cup of Bovril and fans of Sensible Soccer may sneer at it's rather clumsy approach but if you like your footie games, it's certainly worth a view.

**Steve Bradley**

### GRAPHICS

Huge, well-animated sprites and the best-looking terracing of all Amiga football games.

### SOUND

Crowd noise is a tad 'white'. The chants sound like they're coming from a Sheffield urinal.

### ADDICTION

You look at this game and you want it to be good. Spectacular goals should hold your interest.

### PLAYABILITY

It's an odd game. Some will take to it, others will reach for the Sensi disks immediately.

## VERDICT

" Even experienced Amiga football fans will take time to pick up FIFA, but it should be worth it. It's big, it's hard and it's clever. "

## 79%

# GUARDIAN

**Get to grips with Acid Software's new 3D shoot-em-up. But is it the saviour of the CD32 or just another vector graphic blaster with knobs on?**

There's something of a retro movement on at the moment in the games arena. Old classics are being exhumed, dusted off and flogged to a new generation of games players, unfamiliar with their ancient appeal.

The likes of *Space Invaders*, *Pac-Man*, *Pitfall*, *Galaxians*, *Tempest* and *Asteroids* have all been torted up, renamed and repackaged for the 90s. The linking theme in all these games is their simplistic playability – there are no extensive menus to negotiate, no complex missions to complete, no overblown FMV sequences to endure – just pure, balls-out playable action.

And this is where *Guardian* scores highly. Ignoring any plot pretensions, all you have to do is shoot things. OK, there are certain things which you must shoot, some things you shouldn't shoot, and other things that you can shoot if you want to. But, basically, there are things, and you shoot them.

Although immediately reminiscent of *Starwing* on the Super Nintendo, the gameplay is actually closer to a 3D *Defender*, in that you simply have to destroy all the enemy bombers to complete each stage. Your ship also flips direction (a bit over-dramatically it has to be said) in true *Defender* style.

And that's about all there is to it. Clear all the bombers, pick off the remaining stragglers and then zoom off to the next stage. Obviously things become increasingly hairy as you progress through the game: new, more aggressive enemies are introduced and you're occasionally tasked with entering the alien mothership for a little target practice.

Once you get to grips with the controls (you have to manipulate the joypad and all six buttons simultaneously) *Guardian* opens up and turns into quite a pleasing little shoot-em-up. The action is unrelenting and since the confusing 3D gameworld, merciless enemies and cumbersome controls conspire to make *Guardian* quite tough, clearing a level of baddies is all the more satisfying.

## Blinking 3D

But there are quite a few things that I remain unimpressed with. For a 32-bit machine, the 3D isn't really that impressive: objects blink in and out of existence rather than gradually increasing in size as they approach. And it's not as if



Sweeping low across an alien waterworld, I successfully avoid the onslaught of alien fighters only to run into a big building. Doh!



Those spiky red and yellow things are the dreaded bombers. And every single one of them must be destroyed or else you get to play the same level for a very long time.



You can adjust your camera angle, so that you could play the game, for instance, looking at your ship from the side. A neat, though utterly useless, touch.

## STUNNING GRAPHICS

It seems a little ironic that a game with such glorious visuals as *Guardian* should boast, quite possibly, the worst ever packaging in the Universe (that's the offending article on the right). The A1200 version – which is due out in December – will hopefully be snuggling in a big box bearing an image *not* created by Washoe the Chimpanzee.

Once you've cleared the planet of enemy fighters, it's time for the alien mothership to feel the wrath of your lasers...

You're warned that your vessel is in the grip of a tractor beam. Moments later you're dragged up into the bowels (urk!) of the mothership, and it all goes dark...

Inside the spinning mothership you have to pick off the, er, square things and attacking aliens (I just put the autofire on and left my ship where it was). Once all the squares have gone, you fly out the top as the enemy behemoth explodes!

any of the craft and buildings are that complex – there isn't even any texture mapping going on.

When things get busy (which is pretty often) the slow-down is surprisingly bad, and as the frame rate drops so too does the craft's controllability (you're constantly under or over-steering), and your ship wasn't exactly well-behaved to begin with

There are also a few flaws in the game structure, such as the lack of

passcodes (you'll get bored of blasting your way through the early sections to get to the more exciting later ones), and picking up those vital power-ups could be easier: Every now and then, recently demised bombers leave behind a coloured star representing a homing missile, shield refuel or laser upgrade. But steering into them in the heat of

**"And as the frame rate drops so too does the craft's controllability"**

battle is a tad tricky and the little blighters conk out after a few seconds. The number of times I homed in on a star just as it disintegrated... like getting to the phone as it stops ringing. Very annoying.

Having said that, *Guardian* still has plenty to recommend it. For starters it's one of the few CD32 dedicated games in existence, and will find favour with gamers wanting more than a straight Amiga port. The graphics are very colourful, and the CD soundtrack is good 'n' heavy. *Guardian*'s not going to set the gaming world alight, but it'll no doubt warm your CD32 up a bit.

Steve Jarratt ○

As you can see, things get a bit busy later on. That's why you *absolutely* need to pick up those power-ups (right).

SHIELD BOOST!

**GRAPHICS**

Surprisingly basic 3D – although the colours are gorgeous, and later levels do get very busy!

**SOUND**

The shiny silver platter is responsible for some very tasty soundtracks; the effects are fine.

**ADDICTION**

Tough to control, hard to master but all the more addictive. Passcodes would have helped.

**PLAYABILITY**

Dogfighting alien saucers while hurtling around buildings can be a real adrenaline surge!
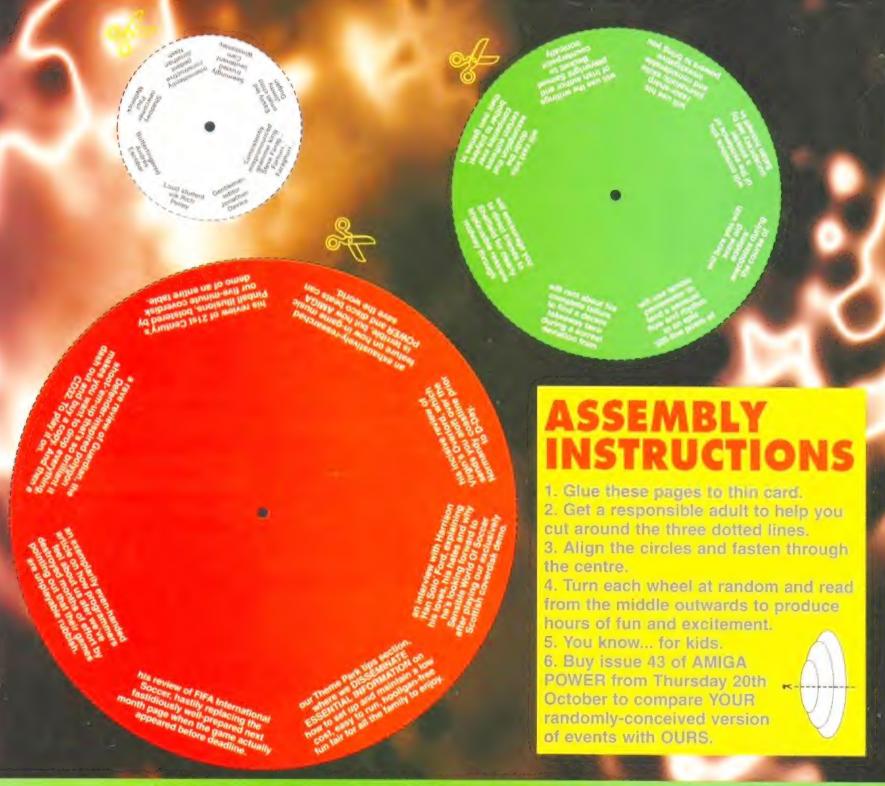
## VERDICT

**" Just what action-loving CD32 owners have been pining for. Not quite the all-time console classic it could have been, but pretty damn close "**

## 88%

# UFO
## ENEMY UNKNOWN

**W**hether you're a keen UFO watcher or a Nick Veitch sceptic who thinks that all extra terrestrials are really weather balloons used by the FBI to spy on hapless nations, one thing's for sure – UFOs always capture the general public's imagination.

UFO: Enemy Unknown from Microprose is a game guaranteed to set your phasers to stun no matter what side of the aliens from outer space theory you believe in.

### Mix and match

UFO manages to combine, shape and meld several game genres to produce a thoroughly entertaining, thought-provoking, reactive, pro-active and strategic gaming experience.

Programmed by Nick and Julian Gollop of 8-bit Chaos and Laser Squad fame, UFO: Enemy Unknown embraces elements of the latter. That is, the main action is turn-based – you move first, followed by the alien.

There now follows a short description of the game from boot-up to assembling an interception squad for the aliens who've landed on Earth.

The first screen you see is the Geoscape. It's a large, round,


The Geoscape is your main control system. It's functional, easy to use and nice to look at.

textured 3Dish representation of planet Earth. It can be rotated a full 360 degrees in any plane of latitude and longitude. In other words, you can centre on any part of the globe so that it appears in the middle of the screen. From there the section that's been centred on can be zoomed into or out of.

### Base control

Your first task lies in the placement of a base which is your UFO early warning detection station. It hosts all the amenities required for efficient early warning and interception of UFOs: living quarters for personnel, hangars for interception aircraft, research laboratories, detection radar, and a whole host of other essential facilities.

Ideally, the base should be placed in a land-locked area. This way, when a UFO is


### INTERCEPTOR
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The Interceptor is the best craft that Earth has to deal with the alien threat. They're not always good enough. So be warned.

detected and shot down, the wreckage is more likely to be recovered by your clean up crews of shock troops.

This is where the game's Laser Squad element comes in. But rather than use the old top-down style of the original Laser Squad, the Gollops have opted for a more satisfyingly solid 3D isometric view. And very effective it is too. The graphics are lush, aesthetically pleasing, beautiful and, er, they look good as well.

Sabre Team players will recognise the tactics and strategies needed to neutralise the alien invaders. Line of sight, limited movement, return fire, use of cover, minimisation of risk, effective use of weapons, personal armour – they are all there to be exploited, refined and perfected. The task of defending the Earth isn't an easy one.

### Fatal progression

Moreover, your soldiers improve with every successful mission they take part in. You start off with some rookies. Each one with his own name. As they improve, they become more resilient and more accurate with their weapons. And they progress through the ranks with each successful mission. You can't help but become attached

## FLOOR BY FLOOR ACCOUNT

In order to make sure that you can view buildings, craft, aliens and the like from different heights, UFO lets you view from various levels above the ground. Here we see a ground, first and second floor view of a Skyranger that has flown to an alien crash site.

## RESEARCH AND DEVELOPMENT

Weapons, armour and functional utilities such as Medi-kits can be researched and manufactured by your scientists and engineers respectively. Their success is absolutely vital, otherwise you lose the game. Therefore, new weapons and alien artefacts must be researched continually.

Covering each other's backs while steadily moving forward is the best tactic when searching for hidden aliens.

Additional equipment and sundries can be added to the Skyranger if needed.

Stand offs, cautious attacks, patrols and aggressive attacks on UFOs are all ordered from here.

to them. Which at times can be a bit of a bind. I had to leave the office for a few minutes after I lost Sergeant Henri Coicaud. He was ambushed by a couple of the aliens while on a lone wolf mission. He will be sorely missed by all.

Although the missions are generated randomly, they increase in difficulty very quickly and the aliens use progressively more dangerous and effective technology. To counteract this, you can recruit scientists and carry out research.

As soon as the research is finished – it may be on developing a new laser pistol, for example – you can manufacture that item with some of your engineers. Your scientists can also engage in evolutionary analysis – from laser pistol to laser rifle, for example.

Experimentation and manufacture is the crux of the

" Soldiers improve with every successful mission they take part in. "

game. In order to win, you have to build a spaceship that will travel to Mars and let you take the aliens on in their own environment. To do this, alien technologies must be exploited and made best use of.

And the game starts to get pretty exciting as soon as some of the heavier weapons and artefacts become available to you. There's nothing more satisfying than downing an alien with only one shot from a laser pistol or a rifle when it would have taken two or three shots to finish him off with standard equipment.

### Jack of all trades

Basically, you've got to be all things to all people – strategist, technician, financial manager, warrior, leader and ultimately, saviour of the world.

The mechanics of the game that let you realise this rather lofty ambition are everything

we've come to expect from Microprose – slick, unobtrusive, well thought out, logically laid out and very challenging.

The Geoscape is lovely, it handles easily and lets you get on with the game. The bases are extremely easy to build and modify, with many features included that you wouldn't have thought necessary until you start using them. And most of all, the tactical section is genuinely tension-building. Especially when you grow attached to your little blokes and can name them all personally.

Because of the sheer quantity and quality of the choice of games on the Amiga market, you never really go back to them for another play unless it's for a feature or something – or unless a game is exceptionally good. UFO: Enemy Unknown is one I'll go back to again and again. Highly recommended.

**Steve McGill**

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Take an early overview of the course – it beats walking.

# PGA EUROPEAN TOUR

G olf, it must be said, is a thoroughly frustrating game. Your feet ache horribly after about five holes, and the hooks, the slices, the hacks, the tops and the missed putts ensure days of plus four-bedecked frustration. In fact, the golfer's favourite sight is the nineteenth hole where one can relax with a frothing flagon and the odd frame of snooker. Computer golf is much the same except your feet won't smart, and you can't relax in the pavilion afterwards.

It's some three-and-a-half years since European Tour's original incarnation, PGA Tour Golf first appeared and despite its years, it's still the finest golf game on the Amiga. Sure, many have improved on the somewhat sparse graphics; many offer more options and courses, but in terms of gameplay, PGA Tour is top of the leaderboard.

And so to its successor. Again, four courses, only this time spread between the fairways of England, France and Switzerland. The first thing you notice is the startling similarity between the two games. Sure, the graphics have been tarted up (even the weather changes), but the gameplay remains faithful to the original. Yet, if we are to be scrupulously fair (we always are, of course) then the saying, 'if it ain't broke, don't fix it', applies here. The only extras are the draw and fade

Once you've struck the ball, the view cuts to the other side so you can see where it eventually lands.


Doris would seem to have a problem here. She's 181 yards from the hole but is forced to play a sand wedge with a maximum distance of 83 yards to clear the rough.

options which enable you to swing the ball around and a pointer system on the overall view of the hole which allows you to pinpoint the yardage anywhere on the fairway.

### Par for the course
In visual terms (and this is the A1200 version), the golfer sprite is better animated and the courses in general, are much prettier but the sound is just a thwack, the odd bird tweet and an occasional 'ooh', from the gallery.

Some odd things abound, though. I'm on the edge of the 11th green, see, and I'm 17 yards from the hole, so why does the computer offer me the five iron which, in this case, can knock it a maximum of 18 yards. I'm only 17 yards away, a


The gallery fills around the 18th hole as you look forward to lifting a trophy and having a game of snooker in the pavilion.
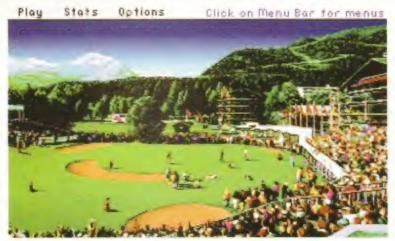
pitching wedge will do just fine thanks! But selecting the pitching wedge only enables you to hit it 12 yards. I've never seen Seve with a five iron on the edge of the green so why do I have to use one?

Gripes aside, PGA European Tour improves on the original – this is basically a port from the Mega Drive – and it's a heck of a game. But if you have the original, the extra courses disk may be a better buy.
**Steve Bradley**


The contours on the green enable you to study the slope. This green here runs from left to right.


Play  Stats  Options        Click on Menu Bar for menus

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# ON THE BALL
## LEAGUE EDITION

Work out the best place for stadium extensions from this screen.

You can only build new extensions to your stadium if you can afford it.

The cinematic narrative of highlights adds atmosphere to the games. Long shots such as this one complement close ups and add significantly to the atmosphere.

A scon released *On The Ball: World Cup Edition* on the Amiga to coincide with the tournament based in the real world. *Amiga Format* reviewed it in issue 63, where it earned itself a more than respectable 80 per cent.

It's more than just the fans you have to keep happy to stay in your job.

"*Beneath A Steel Sky* for football fans," we reckoned.

One of its main charms was the aesthetically-pleasing front end. Rather than use boring function boxes to issue commands, *OTB* employed adventure-style hot spots. For example, a scanned water-colour painting of the manager's office constituted the main control interface. When you wanted to leave the office, you just had to click on the jacket hanging on the coat rack.

### Financial control

*OTB: League Edition*, has a similar front end. If you want to find out about the club finances, click on the safe in the office. Or, conversely, if you need to upgrade your ground, or re-turf the pitch, click on the pitch

outside the window. It all makes logical sense and soon becomes intuitive to use.

Several other features such as animated training regimes, holding of press conferences, real-time adjustment of team tactics, cinematic representation of the footballing highlights, and player psychology helped *OTB: World Cup Edition* stand head and shoulders above the general management competition. It was a joy to play and ranks as one

of the best football management games currently on the market.

So, why can't the same thing be said about *OTB: League Edition*? It's got the same style of presentation. In fact, some of the screens are almost identical to the original. You could be forgiven for thinking that you were playing the same game.

Yet, the feel and approach is completely different. Not in a good way though. You can't help but form the impression that this game is a

# CLUB SOCCER

Team selection, changing positions and viewing the opposition take place from here.

Chop and change your team tactics, formations and individual player territories from this screen.

The animated highlights appear when the likelihood of a goal is high. The perspective is a bit disconcerting at first, but you soon get used to it.

Even if you have never played a football management game in your life, *Club Soccer* can be loaded up and thoroughly understood within only half an hour of play.

The game offers several very worthwhile features although most, if not all of them have been implemented elsewhere. But the beauty of *Club Soccer* is the ease of access to each feature.

Little self-explanatory icons illustrate the main menu. It's obvious what they do, but as you place the mouse pointer on each icon its function is highlighted at the bottom of the screen.

So much for front ends then. The actual mechanics of the game are very sound. You can either edit a league division of your own making or play in the pre-saved Third Division. There are loads of

customisation options like this throughout the game.

The manager can choose any team from the league. Each team offers a specific purpose for the manager to aim for, so when I first played as the manager of Doncaster

Rovers, the aim of the team was to finish in fifth position at least. Having a plan keeps things in perspective and modifies your management behaviour accordingly.

Say, for example, that the team had quite a few games left to play

Even when you're dead, you shouldn't let yourself lie down and be buried. Hang on to the very end and see if you can emulate Leeds against Mansfield.



Similar to the *World Cup Edition*, the main control screen is logically laid out.



Properly chosen tactics can produce results against all the odds.



Keeping a tight rein on financial performance affects the overall efficiency and running of the team.

stripped down, not as much fun, version of the original. A lot of the atmosphere seems to have disappeared into a vacuum of mouse clicks and figure calculation.

Finances and numerical statistics play a large part in the game. At the beginning, you have to make a forecast on your expected financial turnover, based on gate receipts, sales and transfers, shops, and youth schemes. Until you become accustomed to the game, you'll get this bit wrong.

### Peer pressure
Performance on the field directly affects financial performance and turnover from the terraces. This also directly affects your performance in the face of your peers, the fans, the public and, more importantly, the board.

But, aside from all of these financial shenanigans, the game simply boils down to a weekly team selection based on who can offer most to the team. The rest of the game doesn't offer as much fun as the *World Cup Edition*. There's no half-time team talk, no multiple choice press conferences, no physiotherapists to be consulted, no animated training sequences and no real urge to remain playing.

*On The Ball: League Edition* is not all bad. As footie management games go, it's pretty good. But ultimately is only a pale shadow in the radiance of its *World Cup* brother. If you've got the *World Cup Edition*, don't even give the *League* version a look-in.

**Steve McGill** AF

" A competent management game which, despite a few nice jinks and turns, remains in the middle of the league table. "

# 70%



BELLE VUE GROUND

Finance is essential to the smooth running of the club. Prices can be raised and lowered to help fund transfers, buy better staff and improve the ground's capacity.



Better staff can help in the overall performance of the club and the team.

and you knew that the worst position they were going to finish in was eighth. If the aim of the team at the beginning was to finish ninth or better, you could then embark on a luxury policy of channelling money into the youth squad in the expectation that there would be more of a chance of someone talented becoming available for the next season's play. It's a nice touch. And there are plenty more in the game.

The search routine for seeking out a specific type of player for a specific price is a real boon. It saves loads of time messing about and it lets the player get on with what counts – the game.

There are so many nice little details packed away inside *Club Soccer*, that to list them all would sound like the blurb on the back of the box.

Notable exceptions are the option to select the territories that individual players cover on the field of play, the ability to hire and fire staff such as the talent scout and the physiotherapist, and options to raise the gate price.

Suffice to say, *Club Football* is a tidy little package, full of details in a front end that saves you from information overload.

Overall, it's not a first-rate football management game, but it's up there with the best of the second-rate ones.

**Steve McGill** AF

" A nice, tight little package. If it was a player it would be Pat Nevin. "

# 79%

# REUNION

**G**lobal pollution and the breakdown of Earth's ecology is a theme which runs through many set-in-the-future games and *Reunion* is the latest in this tradition.

Mining, industry and science have completely messed up the planet, so colonies have had to be developed on new worlds to allow the human race to survive. The first of these is the New Earth colony, where you start the game.

The aim is to build fleets of research and transport ships to travel the solar system setting up new colonies and contacting alien races. This is carried out in a system which combines elements of the classic *Sim City* and *Deuteros*. You have to keep the New Earth system running properly (building and maintaining complexes to keep the inhabitants happy) and develop ships and technology to enable you to seek out new worlds fit for colonisation.

From time to time you encounter alien races who don't appreciate their systems being invaded by your humans. Some of them are willing to trade, but others are hostile and must be battled with (this is all getting a bit too xenophobic for me). This pushes your research in different directions, since new technology has



Planet Plain  18310  2927.09.04-08.

Visit faraway exotic planets, and meet their peculiar lifeforms. Then dig up all the minerals and kill the indigenous population. It's the way of the galaxy mate.



*Reunion* is technically proficient but lacks that emotional hook.

to be developed to deal with these various eventualities.

You have to make sure that your developer has the expertise to build the new machines, and that you have the fleets to fly them about the system and the funds to pay the bills. Quite a juggling act.

### Give us a clue

Unfortunately, the invention of new machinery is taken out of your hands. In *Deuteros* your scientists could replicate technology and came up with ideas to overcome problems, but *Reunion* pops up with 'By the way, we've just invented so-and-so' messages. This means that you don't know exactly what's happening and clues for what should be built where are negligible.

Dealing with aliens seems a bit odd too. You are given messages that say an alien lifeform has been contacted, but you don't get to talk

to them until the game decides it's time. This should be one of the most exciting and interesting parts of the action, so get on with it!

*Sim City* and *Deuteros* have a sense of purpose, with specific problems to overcome and the impression that you're gradually getting somewhere. *Reunion* lacks that feeling. It's put together nicely, with complex screens for R&D, trading, mining, and combat, but where it works technically it fails emotionally. There's no real feeling.

Real techie-heads will be able to fathom out a lot of the stuff, but you get to the point where you don't really care about what's happening. Not a lot that you do seems to have a direct bearing on the results. The best bet would be to try and dig out versions of *Sim City* and *Deuteros*. They may be old, but they're still the best games of this type around.

**Maff Evans**

### GRAPHICS

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

The occasionally good graphic effects are let down by an overall weak style.

### SOUND

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

Not much in the way of atmospheric effects. The music gets annoying after a while.

### ADDICTION

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

There needs to be more of a feeling of accomplishment to keep you involved.

### PLAYABILITY

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

Confusing controls and poorly explained objectives make this a gruelling game to learn.

## VERDICT

**❝ Reunion is a strange combination of Sim City and Deuteros, but unfortunately it's not nearly as good as either of those classic games. ❞**



Star Map  35/60  2927.08.16-01.

The elders and leaders gather to contemplate what might have been – a bit like the pools panel.

# 68%

# PREMIER MANAGER 3

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**D**esert Island Discs in space, I thought, reading the blurb on this survival simulation. There you are, government agent Robinson of the Alien World Exploration Dept, on a reconnaissance mission to an unknown planet, when magnetic shields cause you to lose control of your ship and you have to bail out.

Sadly, your new home is not the idyllic, sun-drenched tropical paradise with the disc-spinning Sue Lawley as your host. No, the entire planet is a prison, populated by hybrid dinosaurs, savage convicts, tribes of extra-terrestrials and the sinister Cyborgs, who protect and maintain the giant jail.

'Ere, are you eyeing up my trees?', asks the blocky-faced man, starting a fight to the death. Or something.

# ROBINSON'S REQUIEM

This is the rather attractive options screen where things such as the level of detail, music and sound effects can be adjusted.

Not only that, you've been set up. Your own government have decided you know too much and they'd rather you spend the rest of your days there. Gulp!

Naturally, your task is to escape, but first there is the small matter of staying alive. The French authors of this adventure appear to be firm devotees of *SAS Survival Monthly* because there is much emphasis on not only fighting, but also basic survival techniques such as finding water, converting animals into food and clothing, constructing your own

This is Sesame, your personal health monitoring system.

weapons from whatever is at your disposal and, er, performing surgery on yourself, if required.

Your view of the world is 3D first-person perspective, where you see through your character's eyes, and your movement smoothly scrolls the surrounding terrain, which I much prefer to hideous flick-screen adventures. All actions are mouse controlled through easily understandable icons, while suitably atmospheric sound effects alert you to the danger that is all around.

The first person I met explained that it's 'every man for himself', so I killed him and stole his belongings. He was right.

The official AWE survival handbook is provided with the game and it provides invaluable information on staying alive; from how to amputate your own gangrenous limbs to the secret of enjoying alcohol. The manual also shows you how to interpret Sesame,

your personal computer which monitors your health.

In best adventure tradition, combining seemingly useless objects produces useful tools: make a bow by using a branch and creeper; arrows are made with branches and feathers and so on.

Eating, like sleeping and drinking, is something you'll be doing a lot of in this game, because as many bodily functions as decency permits have been reproduced and must be allowed for. Woe betide the reckless who drink water without disinfecting it first, and an innocent pear may not be as nice as it seems.

Despite coming on seven disks, disk-swapping is kept to a minimum, though hard drive owners will be pleased to hear it is installable. That figure seven also indicates the size of the game – for 35 notes you get a whole world to explore.

## Attention to detail

There are enough adventure elements to test even the most lateral thinkers, but just wandering around, exploring and discovering how long you can stay alive is enjoyable, thanks to the non-linear gameplay and the care and thought that has gone into the construction of *Robinson's Requiem*.

**Dale Bradford**

Oh dear, I don't feel well at all. Anyone got any Alka Seltzer?

### GRAPHICS
Realistic terrain moves convincingly, though a bit more detail would have been nice.

### SOUND
Excellent effects. Running water sounds like water and life-threatening tigers sound like...

### ADDICTION
It's big, it's going to take a long time to finish and it's not easy, but would you want it to be?

### PLAYABILITY
Pleasingly intuitive controls, you won't need to keep referring to the manual all the time.

### VERDICT

" **Robinson's Requiem is the sort of epic quest usually associated with PC compatibles, but which thankfully avoids all the Middle Earth AD&D clichés.** "

## 82%

# CRYSTAL DRAGON

T he programmers of *Crystal Dragon*, Magnetic Fields, are industry veterans, previously responsible for such gems as *Lotus Esprit Turbo Challenge*, *Supercars* and *Kid Chaos*. This, to my knowledge, is their first RPG and it owes much to the original *Dungeon Master* game, in style at least.

After the lovely introduction, the player selects a party of two to go off and defeat the evil Ariath, who's built a fortress around a magical crystal. Your two characters may come from any of the warrior, paladin, thief, assassin, cleric or magician classes, but a 'brains and brawn' approach is probably best.


The mighty sword of Sonja takes six hit-points off the well-drawn, but not particularly scary, guard. The wizard looks on, holding the coats and the torch.


A locked door, some curious scrawls on the wall and six buttons which move in and out when pressed. What do you make of it, Watson?


Ooo look, a not-very-well-hidden secret scroll. I wonder what it says?

Once the player has added his extra ration of points to the party's attributes, he begins his epic quest. And is immediately confronted with a blocked stone door surrounded by stone buttons which go in and out, some obscure scrawls on the wall, a scroll which sardonically states 'only the wise may enter', and no idea how to go any further. A little trial and error (all right, a lot), and the door eventually rumbled open.

### I hear you knocking

The next problem is immediately apparent – it's all gone dark. Once you have found the lights, your party can begin exploring the surroundings. The first real disappointment of the game was the way the view scrolled – back to the

bad old flick-screen days of *Dungeon Master*. A minor gripe, perhaps, but flick-screen scrolling can be very confusing and – for me, at least – kills any sense of atmosphere.

### The knights who go 'Ni'

A dripping tap led me to a small fountain just around the corner, which my thirsty characters were extremely pleased to see. Further exploring led us to the guardhouse, where the 'we-kick-butt' inhabitants swiftly killed my brave warrior. As his possessions dropped to the floor, my wizened old magician tried to grab the sword and continue the fight but he too, alas, was rapidly disposed of.

Combat in *Crystal Dragon*, in keeping perhaps with Magnetic

Fields' arcade-action past, is rapid and deadly for the inexperienced player. It is therefore worth creating a save game disk before you start, because this speeds up the process of getting back into the game after your characters have been wiped out; which they will be – very quickly – in your first few games.

A couple of little niggles now. Plenty of disk-swapping is required between games, the save option is hardly obvious when you need it most, but there are plenty of good points too – a self-mapping feature, three difficulty levels and lots of hints are scattered around.

The more I played *Crystal Dragon*, the more I enjoyed it, until I was simply breezing through the game, each attempt taking me further than the last. All manner of useful items are dotted around to help, and the game has a fair amount of depth, with plenty of stats to keep an eye on, if you want to get that involved. Overall, *Crystal Dragon* is very commendable.

**Dale Bradford**

---

**GRAPHICS**

Magnetic Fields' trademark cutesy graphics seem a little out of place in a brooding RPG.

**SOUND**

Pseudo-medieval intro tune and sound effects – just what you'd expect in a dungeon game.

**ADDICTION**

Don't expect a PC-style state-of-the-art RPG, such as *Arena*, and you won't be disappointed.

**PLAYABILITY**

*Crystal Dragon* could appeal to those who have never fancied an epic po-faced quest before.

## VERDICT

❝ I would have gladly sacrificed the detail the flick-screen technique affords for 3D first-person scrolling. That aside, *Crystal Dragon* is enjoyable and accessible. ❞

## 75%

# CD³² GAMES

*Soccer Kid. Arcade Pool. Sensible Soccer International.* CD³² owners have never had it so good! Steve Bradley brings you the latest releases on a silver platter.

**93%**

SOCCER KID: If you want to know more about the Kid get hold of a copy of *Amiga CD³²* magazine. In fact, all the CD³² games mentioned here are reviewed in the mag.

**90%**

ARCADE POOL: *Arcade Pool* is best played in two-player mode and has eight types of game to play. Here you can show off in Trick Shot mode.

**73%**

My house seems somehow, out of time, a relic of a dark past, or perhaps a dark future.
A newspaper.
A newspaper.

DARKSEED: An unremarkable adventure game that has you walking through an alien replica of your house amongst other things. Crumbs!

He's small, he's cool, he never goes to school. I'm talking about **Soccer Kid** (Krisalis, 0709 372290 £29.99). At least he never seems to, for he's too busy travelling the world with a ball attached to his foot, attempting to rescue the scattered pieces of the World Cup which has been nicked by trophy-hoarding aliens.

Soccer Kid's journey takes him from England to Italy, Russia to Japan and on to America. It's splendid platform fare – the parallax scrolling is velvety smooth, the sprite moves fluidly and the levels are gracefully drawn.

The Kid is blessed with some engaging football skills: backheels, overhead kicks, headers and sliding tackles included. It's unusual for such a pretty platform game to play with equal aplomb but *Soccer Kid* is as playable an example of the genre as you will find. Included in this version are an array of cartoon scenes dropped in for good measure but the game stands capably on its own.

**Arcade Pool** (Team 17, 0924 201846, £14.99) has been Number One in the budget floppy charts longer than Wet Wet Wet's recent success. Low of price and high in playability, we spent many an hour clacking the balls pocketward. Some people lamented its lack of realism; but it's an arcade game, we countered, it isn't meant to be *Archer Maclean's Pool Mark 2*.

*Arcade Pool's* top-down view and easy-to-pick-up control method make it a game that you can learn in minutes – but real proficiency takes much longer. The CD³² version has all the options of the original – there are many diverse versions of the game, Speed Pool and Killer are particular favourites of mine. And it's the only pool or snooker game available for the CD³².

My, what a trio. Next up is **Sensible Soccer International Edition** (Renegade, 071-481 9214, £19.99), a game which needs little introduction. In gameplay terms, it's the same as the last version but all the World Cup teams are now included and a referee appears, liberally brandishing red and yellow cards. Oh, and all the club teams have been updated too. But there's no Leeds United this time – you fools,

**10%**

BATTLETOADS: Sadly, this beat-em-up is so poorly done that we can't recommend it to anyone. Don't buy it.

take off 47%, and be grateful it wasn't more.

Seriously, this is as playable a computer game as there has ever been and at £19.99, it's a bargain. If you have the original and wish to update to this version, you can do so for only eight nicker.

Take a small man who, undeniably, resembles a certain Charles Brown Esq and give him a cuddly, dumb, caped sidekick. Call them **Bubble And Squeak** (Audiogenic, 081-424 2244, £29.99) and ask them to rid the planet of a heinous bunch of villains.

Five worlds and 30 levels of platform action (including bonus shoot-em-up sections) lie in their path before parity can be restored, and these can be tackled in one of two ways. Either you (that's Bubble) can head off and clear the level of baddies before returning to collect Squeak and escorting him to the exit, or you can drag him along for the ride. Unfortunately, the colourful and varied levels fill with water, so you can't leave him for too long.

Anyway, as you can imagine, all kinds of comic shenanigans occur along the way. Squeak is quite useful at times – he can chuck you in the air and if you collect gumballs, you can give your pal superpowers.

*Bubble And Squeak* is a better-than-average platformer although your masked chum occasionally drives you to distraction, particularly if you've made it to the top of the level, the exit beckoning and you successfully make that final ledge – then Squeak follows your moves to a tee, yet he just misses that final platform and falls to the bottom of the level. Doh!

**Myth** (System 3, 081-864 8212, £14.99) is a game where a Wolf (of *Gladiators* fame) look-a-like battles a variety of characters who

**81%**

BUBBLE AND SQUEAK: Bubble and his annoying-at-times-but-very-useful-in-a-crisis pal Squeak bring cute platform action to the CD32 in a big way.



**62%**

LAST NINJA 3: A sort of beat-em-up that's let down by some annoying flaws. On the other hand the graphics are pretty and it's cheap.

mainly resemble extras from *Jason And The Argonauts*. It's a hack-n-slash beat-em-up platformer. Only it's not as good as *Second Samurai*, which incidentally isn't out on CD32 yet, so the comparison is a tad pointless. The sprite suffers from incredibly stiff joints and the gameplay suffers accordingly.

**Last Ninja 3** (System 3, 081-864 8212, £14.99) isn't a beat-em-up, though the genre features strongly in the game, nor is it an RPG although you do take on a role and have to wander through temples solving the odd puzzle.

Your task is to rid an isometric-viewed sacred temple of evil Shogun and his henchmen but it's unlikely the fight sequences will inspire beat-em-up fans because the characters occasionally become obscured by trees and buildings – and they're rather small. It's quite a pretty game and there is plenty to have a go at but it's dreadfully uninspiring.

**Battletoads** (Mindscape, 0444 246333, £29.99) is not a game you should consider buying. *Battletoads* is not a game you should consider stealing. If you receive *Battletoads* for your birthday, simply smile politely and then decapitate the bearer. It's 12 flawed levels of nonsense, a bit of beat-em-up, shoot-em-up and platform – all poorly executed. Go away.

**Darkseed** (Cyberdreams, 071-328 3267, £29.99) is a game about a man called Mike Dawson, and Mike has been 'interfered' with by some aliens. You have to wander through a variety of locations picking up bits here and there.

There are some nice visuals and the odd horrific bit, but it's all rather unexceptional. Still, those with a feel for wandering-around-looking-for-things adventure games should enjoy *Darkseed* – especially meeting the bizarre alien counterparts of the real-life characters.



**60%**

MYTH: Another inexpensive game that will keep you busy hacking at bloodthirsty monsters while you admire the graphics.

# SENSIBLE SOCCER





CHOOSE CUP TEAMS. **94%**

SENSIBLE SOCCER INTERNATIONAL EDITION: At £19.99 the latest incarnation of *Sensible Soccer* is a real bargain. *International Edition* features all the World Cup teams and a card-brandishing referee (just like the World Cup really when there were more cards than at WH Smiths). Somehow Leeds United no longer feature among the domestic teams, which would imply that those clever chaps at Sensible have built in some sort of quality control.

# RE-RELEASES

**Steve McGill waxes lyrical about the budget release of two of the best ever Amiga games and a platform favourite...**

**93%**

There's no doubt that Geoff Crammond's **Formula One Grand Prix** (Powerplus, 0276 684959, £16.99, AF32 92%) is the best full-price game ever to be released on the Amiga – it's a fact of life. Now it's also the best budget game ever to be released on the Amiga.

So, logically speaking, that means that it's the best game ever on the Amiga times two. And at half the original price, that makes it four times the value in terms of gameplay that it was originally. Or something like that. But what makes it so good, and why has it managed to remain at pole position since its release?

**FORMULA ONE GRAND PRIX:** Geoff Crammond worked closely with the Footworks Formula One team to create the realistic effects that make *F1GP* one of the finest Amiga games.

### Good gear

The answer is simple. Realism and attention to detail. Each of the 16 circuits has the bends in the right places, at the right distance from each other with the right angle of attack needed for the car to negotiate them.

The car itself is a beast to control. All that speed, power, acceleration and slip differential are just too much for the novice driver to get to grips with straight away. But features such as automatic braking, automatic gear changing, self righting spins, indestructibility, suggested gear and ideal line of travel help to ease the new driver

gently into the game. Each of these helpful options can be discarded as soon as your driving skills in that particular area are up to scratch.

The feel of the car is staggeringly realistic. You end up bracing yourself when braking hard into corners and accelerating into the straights. If you bust your tailfins or aerofoils, you can feel the loss of

performance straight away. Likewise when the car's tyres start wearing out, the handling loss is perceptible. The realism and atmosphere is further enhanced by all the cars carrying team colours.

When *F1GP* first came out, the majority of Amigas were A500s. Now with the A1200 being the dominant platform, you can enjoy

**GUNSHIP 2000:** An absorbing and compelling combat flight sim which (like *F1GP*) owes much of its lasting appeal to its realism.
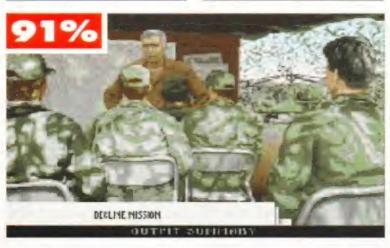
playing the game at twice the speed. It's a marked improvement on the A500 game and gives *Formula One Grand Prix* a new lease of life.

If you haven't got this already, the new price of £16.99 means you should make it a priority purchase. No Amiga games collection could ever be considered complete without at least one copy of *F1GP* residing in the disk box.

### It's a fair copter

If *F1GP* is the king of Amiga driving games, then the king of the rotational collective of flight sims has to be **Gunship 2000** (Powerplus, 0276 684959, £16.99, AF49

**91%**

DECLINE MISSION
OUTFIT SUMMARY

**80%**





FANTASTIC DIZZY: What it lacks in state-of-the-art graphics, it makes up for in puzzley platform gameplay.

94%). It gives you the choice of flying five different kinds of attack helicopter over two massive theatres of war. Again, just like driving a car in F1GP, flying a Gunship 2000

helicopter requires plenty of skill. It's too much for the average rookie to be expected to pick up all at once, so there are several automatic modes such as throttling, landing and terrain hugging to help ease the way into real combat flying.

Missions are doled out at random and they help familiarise the pilot with weapons systems and identification of the enemy. For example, hellfires are used against tanks, sidewinders and sidearms against airborne targets and Penguin missiles against ships. In fact, the

game is quite an eye opener and an education into the various attack strategies and equipment used by the US Army.

Gunship 2000 is a state-of-the-art flight sim that fits in nicely with the squadron of flight sims you're likely to have collected already.

### Dizzy heights
When **Fantastic Dizzy**
(Codemasters, 0926 814132, £14.99, AF55 87%) was first released it broke new ground for Dizzy games. For starters it had proper scrolling, 32-colour backdrops, a neat day/night effect and a jaunty soundtrack. More ominously, it was also the first full-price Dizzy game – it cost £25.99.

Thankfully, this re-release is an AGA upgrade and it costs a much more sensible £14.99. Which can only be a good thing especially because Fantastic Dizzy is the best of the Dizzy family. The puzzles are more logical than those of old and interest is added with the inclusion of sub-games such as tile-sliding, mine-cart-riding and Operation Wolf-style shooting galleries.

The AGA updates aren't immediately obvious, but the appeal of Dizzy doesn't really lie in fabby graphics anyway. It's more the believability of the Dizzy world.

So, if you're after a gentle puzzley platformer that appeals to kids and adults alike, look in the general direction of Fantastic Dizzy AGA. It won't disappoint.

### MAKING THE MARKS ADD UP
All of the games here have two marks – one in the text and one on the picture. The first is the mark the game received when it was originally reviewed in Amiga Format. The score on the picture is what we now think the game is worth, taking into account the re-release price, how it's aged and whether it's been superseded by a new generation of better or faster games.

# GAMEBUSTERS

Stephen Bradley rounds up another selection of reader's tips, hints and cheats to help you preserve your game-playing sanity...

## TRAPS 'N' TREASURES

Reviewed AF60 82% ■
Krisalis 0709 372290

Here are some of the Traps 'n' Treasures passwords.

00000000: Threadneedle Lagoon
52011413: Skull-Grotto
31245300: Temple
15204524: Fortress

## VALHALLA

Reviewed AF61 23% ■
Vulcan Software 0705 670269

I'll keep it short and sweet. The Valhalla level codes are:

lopfgw:     The Sanctuary
uhgwil:     The Chapel
abheft:     The Tower

There you have it. Good luck, you'll need it

**John Oates,
Clayton, Manchester**

## POPULOUS 2

Reviewed AF30 95% ■
Electronic Arts 0753 549442

I think I've found a cheat for Populous 2. The game may be old but the cheat's new!

First, select a conquest game and type in WOITAB (for the last level), and then select Cancel at the bottom of the screen. Then go to Custom Game and go to the in-game options screen. Select I Am Bad then select Quit Game. Now select Conquest game again and select Proceed. Then get all of your men killed. The screen that pops up afterwards should say Land Completed By Good and you should get to the End Game Sequence. This trick might work on other levels but I haven't tried it yet.

**Charles Hobbs,
Almondsbury, Bristol**

# HEIMDALL 2 CD³²

Reviewed AF62 81% ■
Core Design 0332 297797

While playing Heimdall 2 on CD³², I discovered a way of getting loads of money. When you finish a world, don't collect the restart book in the Hall Of The Worlds but instead proceed into the next world and collect as many bonuses as you can. Then, return to the Hall Of The Worlds and collect the book.

Save the game using the save icon in the inventory, then load again. You will still be in possession of the items and money you picked up before you saved the game, but the bonuses will reappear on the next world for you to collect again. You can repeat this process as many times as you like.

**Martin Cooper,
Shanklin, Isle Of Wight**

The Hall Of The Worlds holds the key to increasing your chances of doing it to them before they do it to you in the mythical adventure Heimdall 2.

# FRONTIER: ELITE 2

Become master of the inter-galactic free market economy by selling fruit and veg in David Braben's Frontier.

Reviewed AF54 90% ■
Gametek 0753 553445

Over the months that Frontier has been on the market there has been tip after tip after tip. But one tip has, as yet, not been printed. Well, here it is and it's great. Using the following method you are able to make money, and lots of it.

1) Start off at the planet Ross and then travel to Sol.

2) When you arrive at Sol sell off all of your ship's equipment (including the lasers), but hang on to the automatic pilot.

3) You now have more money and more cargo space.

4) Buy fruit and veg and go to Barnard's Star. Remember you don't have atmospheric shields, so always land at space stations. Don't worry about being attacked, you won't be.

5) When you reach Barnard's Star sell your fruit and veg and buy computers or robots.

6) Go back to Sol.

7) At Sol check the Bulletin Boards for anyone wanting your cargo.

Somebody will want computers or robots one out of five times and will pay a very high price for them.

8) Go to step four.

When you have enough cash buy a bigger ship and continue the trips. It may take a few hours of playing but you'll get several million credits and a great big ship, which you can sell to get a little fighter.

Now you can concentrate on fighting and improving your rank and status. If your money gets low simply do the trips again.

**Gary Robson, Cleveland**

# MONKEY ISLAND
## THE COMPLETE SOLUTION

**With the budget release of *Monkey Island*, a new generation of people are wandering around looking for rubber chickens...**

**£25 winner**



How to get past the troll is a problem that has baffled *Monkey Island* players for years, but now GameBusters reveals the game's many secrets.

Reviewed AF23 92% ■ Kixx 021-606 1800

We decided to send you this complete solution to *The Secret Of Monkey Island* for two reasons:

1) Ever since *Monkey Island* came out on budget, we have noticed a steady stream of people writing in to magazines for help.

2) We wanted to get our grubby paws on the £25 mail order prize that you so generously hand out every month.

### PART ONE – THE THREE TRAILS

Go to the Scumm bar and talk to the pirate in the red coat. Walk into the room at the far right of the screen and talk to the important-looking pirates, tell them you want to be a pirate and they'll tell you that you have to do three tasks: master the sword, the art of thievery and go on a quest.

Ask them to tell you more and when you have found out everything you need to know wait outside the kitchen. When the cook comes out, walk into the kitchen and pick up the pot underneath the table and the meat on top of the table. Open the door to the right, go outside and stamp on the plank until the bird flies away. Then pick up the fish and leave Scumm bar.

Leave the screen to the left, go past the watchman to the path and on to the clearing. Walk to the circus tent and speak to the Fettucini Brothers. Being the kind and caring sort of bloke that you are do their little stunt. When they ask for the helmet give them the pot you brought from the kitchen.

Reluctantly accept the 478 Pieces Of Eight they give you for risking your life, leave the hut and head for the fork. When you arrive, take the path on the left and pick up the flower. Use the flower with the meat and go back to the village.

Walk through the arch and speak to the shifty-looking guy on the corner. Tell him that you once had a brother named Dominique and buy the map for 100 Pieces Of Eight. Go left and speak to the men of low moral fibre (pirates), trying not to irritate their rat. When you are offered the minutes, say that you'll take them if they give you two Pieces Of Eight. Walk away and open the first door on your right. Go in and talk to Mrs Voodoo. Go outside, taking the rubber chicken on the trunk on your way. Go through the archway under the clock and walk into the alley. Speak to the grumpy sheriff and try not to get arrested.

Go to the prison (the building with the lighted arch) and speak to the prisoner. Go back outside and walk into the shop. Pick up the sword and ask for some mints. Go all the way back to the prison and give the mints to the dragon-breathed prisoner. Find out some more info and leave.

**Go left through** the big arch and give the poisoned meat to the cute little piranha poodles. Open the mansion door and walk in. Pick up the vase and go through the glass door. Wait for the commotion to stop and go back to the prison with your newly-found items. Give the gopher repellent to the prisoner and open the cake that he gives you.

Head back to the mansion and climb through the hole in the wall. Talk to the governor and then to the sheriff (politely). Go for a paddle, pick up the idol and climb out of the sea. Talk to the governor again, go back to the Scumm bar. Give the idol to the important-looking pirates and leave.

Go back to the shop and buy the shovel next to the safe. Ask the man where you can find someone to fight with the sword. When he leaves follow him to the swordmaster and speak to her. When she has finished, find your way back out of the forest and go to the bridge.

Give the fish to the troll and carry on to the house. Open the door and talk to the trainer. Ask him to teach you to be as good as the swordmaster. When he tells you that you're no good, keep on saying that you are until he backs down. Show him your sword, go in and start your training. After you have finished training go back to the map and wait on the corner opposite the fork. Pick a fight with any pirate you happen to meet. Keep fighting until you have all the insults and have won at least three fights.

Go back to the swordmaster and beat her at a sword fight (this bit took us bloody ages). When you have beaten her and have your great present go back to the fork and off to find the treasure. Find your way through the woods (we're not going to tell you how because we're gits).

When you get there use the shovel to dig up the treasure and head back to the Scumm bar with your two new T-shirts. You will notice that there is nobody there except for a crying cook. Pick up all of the mugs and walk into the kitchen and use one of the mugs on the barrel. Take the melting mug to the prison and as the mug melts use it on another until you arrive at the prison, then use the grog on the lock. Ask the prisoner to join your crew.

**Next go to** the path and make your way to the little island. Climb the pole and use the rubber chicken on the cable. Walk to the house. Open the door and enter. Tell the topless guy about the governor and suggest sailing off to find her (with you as captain of course).

After he has unlocked the door, open the small door and irritate the murderous winged devil (parrot). Talk to the guy again and get him into your crew. Now go to the swordmaster and ask her to be in your crew. Go to the lights on the map and inquire about buying a boat. Find out about the cost and go back to the shop. Ask the storekeeper about a credit note, tell him you have a job and when he opens the safe, copy down the combination. For all you lazy people it's: Pull, Pull, Push, Push, Push, Pull, Pull, Pull, Push, Push.
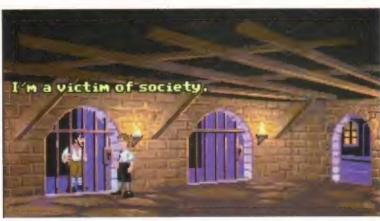
**Tell the storekeeper** that you are looking for the swordmaster and when he leaves, walk to the safe and pull/push the handle according to the combination (you may have to do this a few times to make it work). Take the storekeeper's note and head to the boatyard. Buy the cheap boat using the storekeeper's note and then leg it to the dock.
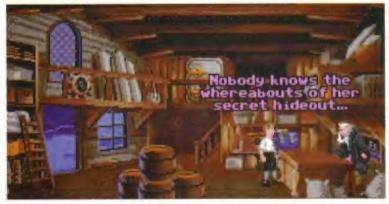
### PART TWO – THE JOURNEY

On your shiny new ship, you start off in the captain's cabin. Open the drawer and pick up the book then pick up the feather pen and ink on the desk. Walk to the deck, climb the rigging, pick up the Jolly Roger and walk to the hatch then walk to the door downstairs. Open the cupboard and take a box of cereal.

Open the cereal and pick up the pot on the workbench. Go back up and walk to the bottom of the ship through the hatch. Then pick up the giant piece of rope, open the kegs, pick up some gunpowder, open the chest and pick up the fine wine. Go back to the captain's cabin and use the small key in the cabinet. Pick up the chest, open it and look in it. Go back to the kitchen and put the

I'm a victim of society.

Pay no attention to the prisoner's sob story, just get him to join your crew so you can sail away on your ship to the next part of the adventure.



Nobody knows the whereabouts of her secret hideout...

The shopkeeper is being economical with the truth. If you buy the shovel and follow the shopkeeper when he leaves, you'll find the swordmaster.

following ingredients in the pot: cereal, fine wine, cinnamon sticks, Jolly Roger, ink, rubber chicken, breath mints and finally gunpowder.

When you wake up use the business card in the fire then get some more gunpowder and go to the deck. Use the rope with the cannon and use the gunpowder with the cannon nozzle then use the pot (BOOOOMMM!!!!!).

### PART THREE – UNDER MONKEY ISLAND

Pick up the banana and look at the note on the tree. Walk into the jungle, go to the fort and push the cannon. Pick up the gunpowder, cannon ball, rope and spyglass. Open the spyglass and go to the river fork. Pick up the note and rock then cross the bridge and walk to the top of the cliff. Pick up the note and pull the primitive art twice.

**Walk to the top** of the other cliff and walk to the far right of the screen off the ledge (Ha! Ha! Ha!). Now go and push the rock off the cliff. Go down to the bridge and use the gunpowder with the dam, then use the lens with the sun (another BOOOOOOOMMMMMM!!!!!!). Now go to the pond and pick up the rope that the corpse has got.

Go to the crack, use the piece of rope with the strong branch and the other bit with the sturdy stump. Pick up the oars and climb back up. Find the bananas on the beach and pick

them up. Now use the oars with the boat and paddle to the top right of the screen and go around the island and on to the beach on your left. Now go to the village and pick up the bowl of fruit and get yourself locked up by the cannibals.

Once in the hut pick up the memo and the skull then pick up the floorboard and escape. Go back to the beach you came from, walk to the monkey in the jungle. If you feed it the bananas, it will be your loyal and trusty companion and follow you everywhere.

Go back to the jungle and walk up to the right of the screen, then walk right into the clearing and walk to the furthest totem pole away from you and pull its nose, let go of the totem pole and the monkey will do the same.

Walk through the gate and pick up the wimpy little idol. Now go back to the beach and take your boat to the village. Talk to the cannibals and give them the idol. Go inside the hut and pick up the banana picker and give it to Herman Toothrot in exchange for the key. Now find the cannibals again and give them the How To Get Ahead In Navigation leaflet.

Go back to the monkey head and use the key in its ear. Walk inside and use the navigation head and follow its nose to the ghost ship. Once there, talk to the head of the navigator and plead with him until he lets you have the necklace.

**Use the necklace** and walk to the ghost ship. Walk through the door on the left and use the magnetic compass with the key. Leave and go down the hatch. Walk through the hatch and pick up the ghost chicken. Go back to the cabin and use the feather with the sleeping crew member's foot.

Pick up the jug 'o' grog and go back through the passage and use the key on the locked hatch. Use the jug 'o' grog with the dish and pick up the grease. Now go back up on to the deck. Use the grease on the squeaky door and go in.

Pick up the ghost tools and go back to the pig room. Use the ghost tools on the glowing crate and leave the ghost ship. Go back to the village and give the cannibals the voodoo root. Now go all the way back to the ghost ship and talk to the ghost you find there. Now go back to Melee Island.

### PART FOUR – LECHUCK'S DEMISE

Rush to the church, plasmarising any stray ghosts that you bump in to on the way. Stop the wedding and talk to LeChuck. When you get thrown into the grog machine use the root beer on LeChuck and watch the happy ending.

**Paul Spadaccini and Simon Chettleburgh, Poole, Dorset**

## SYNDICATE
Reviewed AF49 91% ■ Electronic Arts 0753 549442

Here are some cheats and tips to help you crack this very difficult game. Type the following in as company names.
Rob a bank – gives you 10,000,000 in cash.
Nuk them – allows you to go anywhere on the map.
Marks team – gives you all the weapons and body parts it gives you all the people in the team.

I also have a few other tips for you: if you don't want to lose any of your team and you think you are going to die then press Esc and start the mission again.

If you are in a car and you get fired at get out of the car because when it explodes you might die or lose a lot of energy. Another good idea is to persuade a lot of people because they can act as a shield, they also pick up weapons and fire at whatever you fire at.

**David Cross, Cwmbran, Gwent**

# HELPING HAND

Pressure getting to you? Never mind, eh. Still, if it all gets too much for you then drop Steve Bradley a line – he's always on hand to help.


INDIANA JONES: "It's all down to the ladder and the chest plate," said Indi.


MONKEY ISLAND: The voodoo that you do is no monkey business.

## HEIMDALL TOO HARD


HEIMDALL 2: A graphically gorgeous, 3D isometric, Nordic myth and RPG adventure game for which a helping hand is occasionally needed.

### BRACE YOURSELF
I have three parts of the amulet in *Heimdall* 2. One part from Utgard 2, one from Her'Keryn and one from Tel'Keryn. Where do I get the other part? And how do I get a pass for the castle?

**Peter Hall, Oldham, Lancs**

*Go to the closed door at the end of the corridor and place the Holy Symbols on the spaces on the floor. Go up the stairs and place the shield in the path of the laser light. Take the piece of Ro'Geld and go back to the Nature God room and take the other symbol. Then head back to the Hall Of The Worlds for Her'Keryn. Give the Druid the symbol. Walk through the gate in the trees and on to the turtle's back and say hello to the fire sprite. He will teleport you back to the Hall Of The Worlds.*

*To get the pass, head for Rurik's village, go to the hut and get the circlet from the store room. Then go to Eadric's village and give Eadric the circlet – Eadric will give you a letter. Take the letter to Rurik and he will give you the pass to the castle. You hope.*

### FROZEN ASSETS
In *Heimdall* 2, on the Giant Isle in the room with the Ice God, there is a head in a pool of frozen ice and a lake which I cannot cross. Please help.
**S Richardson, Hucknall, Nottingham**

*Fill your flask with water from the pool in front of the statue and then go back into the Fire God's cavern and pour the water on the fire. Return to Frigidarius' boudoir and you'll find that a bridge has appeared. Cross the bridge and follow the path until you come across a room with a creature inside. Kill it and pick up the talisman you find there and then throw the rainbow ring into the sphere of light.*

### STEAM HEAT
In *Heimdall* 2, I've entered Nilf'Heim but I can't kill Loki's daughter – everything I shoot at her evaporates and she's surrounded by sea of lava. Help.

**Mark Edge, Great Walsingham, Norfolk**

*Pity it isn't a sea of lager. No matter, you don't need to kill her anyway. There are three heads in the room. Fire an arrow into each head and then you can go through the door on the right.*

## MARS A DAY AWAY
I'm having trouble colonising planets in *Millenium 2.2* – every time I send a probe to Mars it gets blown up. How should I go about it?
**David Russell, Durrington, Wilts**

*Don't bother sending probes to Mars or Jupiter, concentrate on probing, researching and colonising Triton first. You must research the development of a fleet carrier – once you have built one, fill it with fighters and head for Mars.*

*When you're attacked by the Martians, launch your fighters and eventually they'll surrender. Now colonise Mars. You should find plans of a Martian terraforming machine which makes the Earth's air breathable – research and build as soon as possible, although you'll find you need plenty of chromium which is where Triton comes in.*

*Anyway, that's quite enough for now. Good luck.*

## STONE POSERS
*Indiana Jones And The Fate Of Atlantis*: I have worked my way through the outer ring of Atlantis but cannot free Sophia. I've tried fixing the statue by the doors but I need a sun/star shaped piece to complete the machine to get the statue working. Where do I find it?
**J Lonergan, Yorkshire**

*Walk to the canal and on to the raft and put the bead into the crab's mouth, then float to the right-hand gate and use the sunstone on the spindle.*

*Float through, use the moonstone on the next spindle and then the worldstone on the next two spindles. Float to the pile of bones and go through the door at the top of the steps and pick up the gear. Back at the raft, use the moonstone on the spindle, float through and use the stone on the spindle. Float through the archway.*

*Use the chain with the bronze loop on the door and the other chain with the statue arm. Use the ladder on the sentry statue and open the*

chest plate. Put the spoked wheel and the statue part on the middle peg, the crescent gear on the right-hand peg, the round gear on the bottom-left peg and then put the bead in the centre. Pick up the hinge pin, go back to the dungeon and give Sophia the hinge pin.

*Open the cage, tell Sophia you have a plan and tell her to prop it open with the pin. Open the cage, pick up the hinge pin and go on the raft to the door you open with the peculiar mechanism. And now for an informal discussion on the Maastricht Treaty.*

## WHERE'S THE GRAVY?
I'm stuck on *The Secret Of Monkey Island 2* where I've reached the Big Whoope. Le Chuck has got a voodoo doll and keeps using it on me. I have got a ticket with an E on it, a syringe, a bottle of root beer, a generic kewpie doll, a helium-filled balloon, a pair of surgical gloves, a skull belonging to my father and Le Chuck's underpants. I think I need to make a voodoo doll.

**Mark Price, Swansea**

*First you need to put Le Chuck's underpants on the doll. Then take the surgical gloves and the bottle of root beer to Atlantis to the cave with the bear in and swap them for the bear's string vest and his jug of gravy.*

*Return to the island and swap your father's skull for his socks. Put the socks and the vest on the doll, then pour on the gravy. Voila, you now have a fearsome voodoo doll dressed in its smalls covered in gravy. I'm sure that's right.* ⏣

You can't **choose your parents**. Thankfully you can **choose your own bank** account.

**National Westminster Bank**
We're here to make life easier

# SERIOUSLY AMIGA

## AMIGA FORMAT

Get tooled up for 3D model manufacture with *Pixel 3D Pro v2*, reviewed on page 100.

## AMIGA FORMAT

### WELCOME!

Well, I'm now back from my two weeks of holiday I was grudgingly permitted to take, but nothing much seems to have changed.

Apart from all the excellent new software we've had in. The big shock of the month is *PageStream*. Just why did it get such a low mark? Well, why don't you see what Marcus has to say about it over the page.

It really isn't a very good idea for software companies to release their products with major bugs in them, even if they do plan to update them very quickly. As we have waited well over a year for *PageStream 3*, a few more weeks to remove the errors wouldn't really have hurt.

Anyway, there is plenty more top action to be had this month, and for once, like you, I will have the pleasure of just reading it, instead of writing half of it. Hurrah for holidays!

*NICK VEITCH*

## REVIEWS

**It's been a long time coming, but now it's here. Marcus Dyson lays out a few pages with the new version of *PageStream*. And asks, was it really worth the wait?**

E agerly awaited. To describe *PageStream 3.0* in these terms would be an understatement the size of the Himalayas.

Long ago, when Commodore was an international company with subsidiaries in every major country, *PageStream* was to be the killer application. The program which was going to show every owner of every other (inferior) machine just what the Amiga could do. Time has taken its toll, and that awesome responsibility has fallen on the shoulders of *Lightwave*. But enthusiasm for the impending (and impending, and impending) arrival of *PageStream 3.0* did not wane.

The program was already in a pretty impressive state when I saw it at the World Of Commodore show in New York in April 1993. Publishers Soft Logik, were putting out a press release which included a features list that compared *PageStream* not just with its obvious rival Gold Disk's slightly clunky *Professional Page 4*, but also with the king of all DTP programs *Quark XPress*. According to the press release (a somewhat biased publication maybe, but it was certainly based on fact) *PageStream* kicked the asses of both those programs.



# PageStream 3.0

But that was a long, long time ago. In the intervening months *XPress* has gone through one major and several minor revisions, and *ProPage* seems to have dropped out of contention altogether. So it was with delight and surprise that I saw *PageStream* sitting on the shelf at the First Computer Centre in Leeds.

Delight because it was out at last. Surprise because after months (years even) of chasing a review copy, Soft Logik had shipped it to the shops before sending copies for evaluation. Never a good sign.

But enough background! How good is *PageStream 3.0*? Before you can find out you've got to install it on your hard drive. A complete installation costs you around 11Mb of hard drive space, most of which is fonts and clip art and a more modest partial installation requires less than 4Mb, but the program crashes whenever you try

to load it. After you've installed *PageStream*, you see a very interesting ReadMe file which points out that although Soft Logik have been forced by unreasonable pressure from users, potential users and unscrupulous magazine reviewers like myself to release *PS3.0*, it is actually not finished yet. Shock! Horror!

**It then lists** features which are not yet implemented. They include: Append, Save As Template, Find/Replace, Spell Check, External Articles And Graphics, Send To Editor (text), Facing Pages, Greeking, some Paragraph Format options, Hyphenation, Applied Bold, Trapping, Anchored Graphics, Auto Backup, Typographic Preferences, Kern Pair Editing, and the Pen and Reshape tools.

As Soft Logik go on to say, the list is certainly quite long, but compared to the

hundreds of features which they have included, it's pretty small.

Maybe so, but there are some important features still to be completed. The ReadMe also states that these features will be sorted and an update disk shipped to all registered users within 4-6 weeks. Whether this turns out to be the case is a

**STOP PRESS**

Just as this issue was going to press a patch for *PageStream 3* began to appear on Bulletin Boards. The patch claims to fix many of the problems, but also leaves many unfixed. The ReadMe declares the patch is the first in a series of free updates for *PageStream 3*. We welcome the fact that Soft Logik are taking steps to address the problems. If they are successful *PageStream 3* has the features to make it a formidable program. But for now we would urge readers to exercise caution before buying *PageStream 3*. Watch these pages for news of the updates as they are released.

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15    16    17    18    19    20    21

This is the kind of impressive page layout you should be able to create without any trouble in *PageStream 3.0*... or you would be if it didn't crash with astounding frequency.

...d yet Shock Horror!
... list the features which are not ye'
...ppend, Save As Template,
...ternal articles and graphics,
... Pages, Greeking, some
...phenation, applied bold and
...phics, Auto Backup,
...pair editing, and the Pen and
...go on to say, the list is certainly
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...ates that these features will be
...orted and an update disk
... shipped to all registered users

matter for time to reveal. You can be sure we'll be covering the update as soon as we get hold of it.

*PageStream 3* has undergone a drastic change in appearance, in the number of features and the style in which they are executed. The interface of *PageStream 2* was simple, and tended to rely too strongly on the menus. Many features were buried in sub menus. *PageStream 3* has addressed this by extending the functionality of the main menu, adding a *Wordworth*-style button strip and a measurements palette similar to the one employed by *Quark XPress*. The result is stunning, all the features (and there are a lot more of them) are accessible far more easily, and in a way that is simpler to understand. The requesters now include more functions. The whole layout of the program has been re-built from the ground up, and it's so good you can almost forgive Soft Logik for it being two years late.

The main thrust of *PageStream*'s enhancements has been to look at why *Quark Xpress* is the most successful DTP

## NOT ONLY, BUT ALSO!



PageStream 3's own image processor *BME (Bitmap Editor)* is not too good at choosing palettes. The image on the top left was dithered from 24-bit by *ADPro*, the one on the top right by *BME*.



PageStream 3's text editor is a perfectly decent wordmonger. Most of this review was written and spellchecked in it, but the lack of a word count feature meant I had to switch to *Final Writer* for that function.

Included with the main *PageStream* program are two ancillary programs, *PageLiner* and *BME*. These are a simple text editor and an even simpler bitmap editor. Although the programs themselves are not particularly well featured, the fact that they are integrated with *PageStream* itself has some advantages. If you are working with text in a DTP program, you have to follow the story around the document, whether it is to cut it, spellcheck it or simply to read it through. This can, and usually does, lead to several screen redraws as the screen window moves to different parts of the document, and each redraw takes time (particularly in *PageStream 3*).

But *PageStream 3* offers (or at least will when the update disk arrives) the facility to send the text

to *PageLiner* for editing. The package is fast, offers reasonable editing features and a good spellchecker. The only drawback is the lack of a word count function. All in all *PageLiner* is the best bit of the *PageStream 3* package.

*BME* is a very basic paint package, ideal for making small changes to a bitmap image. Pictures can be sent to *BME* from within *PageStream*. *BME* offers simple editing and image processing tools so that you can select parts of an image and change them into negative, pixelate them or flip and rotate them. It performs quickly on images in up to 256 colours, but while I was using it it had a tendency to crash while attempting to change magnification or scale the images.

# PageStream 3.0

It's been a long time coming, but now it's here, Marcus Dyson lays out a few pages with the much vaunted new version of PageStream. *[garbled overprinted text]* much vaunted new version of PageStream. And asks, was it really worth the wait? Eagerly awaited. To describe PageStream 3.0 in these terms would be an understatement the *[garbled overprinted text]* the internal to be a long time with subsidiaries in every country the *[garbled]* PageStream who the killer *[garbled]*
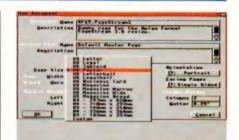
Delight because it was out at last. Surprise because after months (years even) of calling Soft Logik chasing a review copy, they had *[garbled overprinted text]* they had shipped it to the shops before sending copies *[garbled overprinted text]* is PageStream 3? *[garbled overprinted text]* after PageStream software, and a complete *[garbled overprinted text]* clip art, *[garbled]*

**The basis of WYSIWYG design is that when anything is changed on screen, the program automatically redraws the screen to keep you informed of the current state of your design. With *PageStream 3* this does not always happen correctly.**

package on the planet, then match or exceed every aspect of that program's capabilities. This is a mammoth task, but one which Soft Logik seem to have managed in almost all cases. Whether anyone will ever need to use *PageStream*'s ability to display type up to 50,000 points in size is in question. And I dread the day when my workload requires me to have 25 documents open at the same time (*XPress*'s maximum), so *PageStream*'s ability to open an infinite number of documents (subject to memory) seems a little superfluous.

**But PageStream does** have some very useful new features. One document can be open in several windows and changes made in any of the windows are saved to the document. This means that you could have one window showing the last lines of text of a large document while you went through it in another window writing up or cutting it to fit.

The project menu allows the user to hide or reveal any of the open documents so you can work on multiple documents



PageStream 3.0 has an impressive array of predefined document sizes, as well as a custom setting which enables the user to create pages of their own specific dimensions.
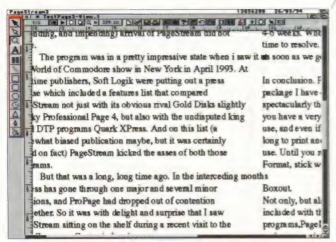
without having an overly cluttered Workbench. Documents can be saved as templates, so if you create a letterhead, then open it and write a letter on to it, you can't save it over the template, but instead any attempt to save it presents you with a file requester so that you can rename it. There is now a much wider range of pre-set document sizes, covering a variety of American and European standards as well as a custom size option for creating pages up to 2,000 inches square.

The new Edit Palette is a direct steal from *XPress*, but it is a superb feature all the same. A small bar at the bottom of the screen carries many of the attributes of any selected object. Clicking and editing these values can move or scale an object, change the colour or typeface of text or do a host of other things. But values in the box cannot be double-clicked to highlight them for editing, so instead you have to click and delete.

A nice feature of the Edit Palette is the pop-up typeface menu which means that
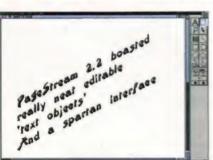
**Continued overleaf →**

Some of the text extends beyond the column and into the next one. This shouldn't happen. Charitable reviewers may describe it as an undocumented feature. It's not, it's one of *PageStream 3*'s hideous bugs.



One of *PageStream 3*'s best new features is the Edit Menu's pop-up text menu.



*PageStream 2.2* had a simple user interface which concealed most of the features within the menus.

← text can now be styled with ease from this window. But despite all its wonderful new features, *PageStream 3.0* suffers from two major setbacks. It's cripplingly slow and it crashes. I know some people will say it is not a fair comparison, but Soft Logik targeted *Quark XPress* heavily in their features list, so now they'll have to bear the comparisons to that program.

**When I started** using *XPress* in 1990 it was still in version 1.something, and I was running it on an old, and decrepit Mac II, powered by a Motorola 68020. But even that *XPress* was considerably faster than *PageStream 3.0* running on an A4000/040. That really shouldn't be the case. The A4000 is a considerably more powerful machine, and we are four years down the line in terms of what users expect in speed.

*PageStream*'s printing speed makes its on-screen operation seem fast by comparison. I had no success printing to a PostScript laser printer, although *ProPage 4* and *Final Writer* printed from the same printer with no problems, and very



*PageStream 3* features a completely redesigned user interface. The Tool Menu moves to the left and is augmented by a handy button strip at the top of the document and a powerful Edit Menu at the bottom. *PageStream 3* has some excellent features, it's just that they don't all seem to work.

speedily too. Using a bubblejet or dot matrix printer via the preferences printer drivers almost ground printing to a halt.

*PageStream*'s propensity to crash is such a problem that even saving a document caused it to lock the machine up completely, although the Save As function worked faultlessly. The package crashed in numerous other situations, and soon became too frustrating to use.

Add to these failings all the features which simply don't do the functions they are supposed to and you have a program which completely fails to achieve its aims. The undo undoesn't, text can often not be re-coloured, and screen re-draws are sketchy at best, and pathetic at worst.

*PageStream* has the specification to be the finest DTP package I have ever used. But it fails to achieve its aims so spectacularly that I would not recommend it to anyone.

Unless you have a very powerful machine it is too slow to be of any use, and

even if you have a power-user Amiga it will still convince you that your Amiga 4000/040 has had the CPU swapped for a 3.5MHz 68000, or that someone has filled your machine with treacle.

**PageStream 3.0 simply** should not have been released yet. In fact, products like this are harmful to the Amiga. Soft Logik will get good initial sales due to the considerable excitement which surrounds the release, but as word of its quality (or lack of it) spreads throughout the Amiga community sales will plummet, and that's one more developer who will lose interest in the Amiga market.

Soft Logik have promised an update soon, and I really hope that they meet that promise. But there's a lot of work to be done, and it's difficult to see how they will turn this pile of manure into a rose garden. Until you read the review of the update right here in *Amiga Format*, stick with *PageStream 2.2*.

## PAGESTREAM 3.0

**DISTRIBUTOR**
Meridian 081-543 3500

**PRICE**
£269.95

**SYSTEM REQUIREMENTS**
Minimum 3Mb, hard disk only

**SPEED** ●
Even on an Amiga 4000/040 with 18Mb of RAM... it crawls.

**MANUAL** ●●●●
Soft Logik's documentation is always good. *PageStream 3*'s comprehensive manual is no exception.

**ACCESSIBILITY** ●●●●
Users of any DTP package, including AF63's Coverdisk program *PageSetter 2*, should have no problem navigating round this intuitive user interface.

**FEATURES** ●●●●●
A more comprehensive features list you could not hope to find. It's a pity more of them don't actually work.

**VALUE** ●
*PageStream 3* doesn't do what it's supposed to, and punctuates this with frequent crashes. The worst value application I've ever encountered.

**"It shouldn't have been released in its current state. I hate to say it, but avoid PageStream 3."**

## 22%

As we've come to expect from all Hama gear, the build quality is excellent and the aesthetics are pleasing. The size and shape means that it integrates into any set-up comfortably.

# Hama A-Cut

**The Amiga offers the greatest potential of any desktop video computer. Steve McGill finds out why the Hama A-Cut helps realise that potential.**

Every Amiga video editor has to fulfil two roles in the editing studio – an aesthetic and a mechanical one. The Hama A-Cut takes care of the latter, allowing the editor more freedom and time to concentrate on the former.

Computer editing can free the video editor from the tedious punch and crunch mechanics of simple stand-alone editing. This gives the editor extra time to play around, encourages experimentation and helps the creative juices flow.

Being able to chop, change, preview, alter and finally edit together several different versions of video pictures is immensely powerful and the A-Cut enables you do all of this. So you learn more about editing than you would using conventional means – seeing and doing is much more productive than reading and theorising.

The A-Cut is housed in a hardy, well-designed and shielded metal box. It sports a jog shuttle dial, two buttons, an infra-red sensor and two seven-pin remote control sockets – one controls a source VCR, the other controls the recorder.

The source machine can be a camcorder or a VCR. Whatever you use, it must have an edit terminal, either Five-Pin Edit, Control-L, Remote or Lanc. If your source doesn't support any of these protocols, you can't use A-Cut.

The recorder can be any VCR capable of being controlled by infra-red. The A-Cut recorder control socket terminates in an IR diode. In other words, you can't connect the recorder to the A-Cut in the same manner as the source – which is a massive oversight on Hama's part because single frame accuracy can never be

**Building an edit list and assembling the footage is easy using the edit decision list. The cut and paste tools make changing the order of the shots a cinch.**
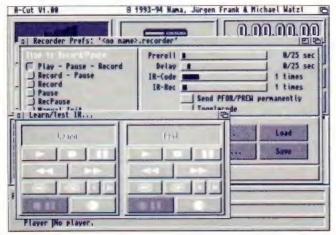


achieved consistently or reliably with the infra-red method.

The best you can realistically hope for is accuracy within plus or minus four frames. This is good but not outstanding. You can confidently edit together a more than professional production with frame error tolerance like this. Just don't expect to be able to cut to the beat or lip sync – for that, you need frame accuracy.

And that's one of the puzzles of this package. The A-Cut receives commands from the Amiga via the parallel port and converts them to serial data for both ports. This means that the recording socket could have been hardwired in the same manner as the source socket. KRP's ES20 video editor allows hardwiring of the record deck as well as two source decks. Single frame accuracy can be achieved easily with compatible recording decks.

Infra-red control is a one-way communication process, so the Amiga doesn't receive any feedback from the recording VCR. Therefore, any fluctuation in the deck's mechanism or skipping of the control track isn't compensated for or spotted by the Amiga. In a worst case scenario, this can lead to excessive frame drift and inevitable inaccuracies.

Admittedly, to keep frame drifting to a minimum, the software offers an auxiliary frame counting program which lets you compensate for the pre-roll and post-roll of both decks. But the bottom line is that

you can never expect frame accuracy with an infra-red system.

Lost opportunity aside, the real beauty of the *A-Cut* lies in the ease of use and its flexibility of control. The jog shuttle, coupled with the extreme user-friendliness of the software, blows the immediate competition of Video Director and Edit Mate out of the marketplace. And, aside from jog shuttle control, you can also control source and record decks from the logically laid out software panels or Amiga function keys. Impressively flexible.

But it's the jog shuttle that serious editors consistently use. If the source tape machine has frame advance, you can accurately locate where you want the cut-in to start and the cut-out to finish. This is achieved by locating the frame via the jog shuttle dial. You then press either the cut button on the *A-Cut* or click on cut-in and cut-out from the requisite software panel.

**The cuts are** then added to and stored in an edit decision list (EDL). The EDL gives the editor incredible power over their work. Say, for example, that you had chosen 10 cuts and they lasted 30 seconds in full. The EDL builds up a list of cut-in and out points in the order that you entered them. The length of each cut is automatically worked out and displayed by the software.
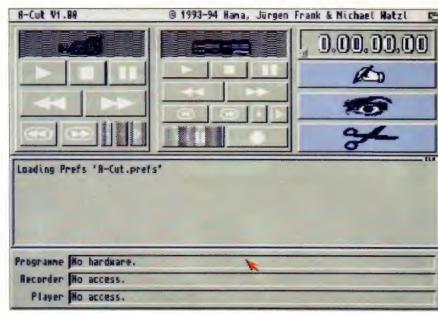
You can also manually enter in and out points or edit pre-existing ones to change their length and running time. Each cut can also be labelled to ease your memory.

Cuts can be previewed before committing them to tape. But the real power is realised if you change your mind about the running order. You can cut and paste sections of cuts, change the order, append other pre-saved lists to the existing one and have a load of experimental fun.

For further expansion and functional enhancement, the *A-Cut* features an *ARexx* port. The potential of an *ARexx* automated

The front end of the software is well laid out and intuitive in use. Control of the source and recording decks can be accessed from here or through the function keys. The source deck can also be controlled from the jog shuttle on top of the *A-Cut* unit itself.

Amiga Video Studio is staggering. Synchronised automation of sound effects, titles and music could all be carried out in one fell swoop.

The Hama *A-Cut* must rank as one of the most promising missed chances to appear for the Amiga. With infra-red control it executes its tasks admirably. Using a Panasonic camcorder with edit terminal as the source deck and a standard Sanyo deck as the recorder, *AF* logged the following results:
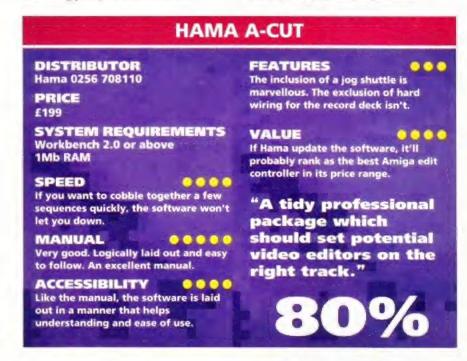
Laying down a 10 scene sequence, each scene lasting six seconds, the best result achieved was a loss of 22 frames – almost a second. An admirable result considering we expected to lose two or three seconds. Occasionally, with the cut-in points, the edits were frame accurate. The cut-out points were a different matter. Frame accuracy was never achieved. But then, we didn't expect any better than that due to the limitations of infra-red control.

Hopefully Hama will rethink their marketing policy for the *A-Cut*. The

hardware is excellent. The jog shuttle is a winner. The *ARexx* port is inspired. The software is exceedingly easy to use. But ultimately, it hasn't realised its full potential. A small re-jig of the software and replication of the leads supplied with the package could have taken Hama's *A-Cut* into the realm of seriously powerful editing. As it stands, it's exceedingly useful. The inclusion of a hardwire interface with the recorder would have made it invaluable.



If required, the software even provides an on-line help facility in case you get stuck.



## HAMA A-CUT

**DISTRIBUTOR**
Hama 0256 708110

**PRICE**
£199

**SYSTEM REQUIREMENTS**
Workbench 2.0 or above
1Mb RAM

**SPEED** ●●●●
If you want to cobble together a few sequences quickly, the software won't let you down.

**MANUAL** ●●●●●
Very good. Logically laid out and easy to follow. An excellent manual.

**ACCESSIBILITY** ●●●●
Like the manual, the software is laid out in a manner that helps understanding and ease of use.

**FEATURES** ●●●
The inclusion of a jog shuttle is marvellous. The exclusion of hard wiring for the record deck isn't.

**VALUE** ●●●●
If Hama update the software, it'll probably rank as the best Amiga edit controller in its price range.

*"A tidy professional package which should set potential video editors on the right track."*

**80%**

**Designed to complement any 3D modelling program, is version 2 of Axiom's 3D object utility worth the upgrade? Jason Holborn finds out.**



Pixel 3D Professional V2.02 – © 1994 Axiom Software

*PixPro 2 happily loads and saves 3D objects in a variety of different formats – this Porsche, for example, is bundled with NewTek's Lightwave.*

*Left: Axiom have obviously put a great deal of effort into ensuring that Lightwave users feel right at home with PixPro 2. If you've used the Lightwave layout editor then you'll be very happy using this program!*

# Pixel 3D Professional V2

A miga 3D modelling programs have certainly come a long way since Eric Graham's Juggler animation caused jaws to drop way back in 1986. As the performance of the Amiga's own hardware has advanced, so has the quality of rendering packages – comparing a relatively new package like NewTek's *Lightwave 3D* (reviewed last ish) with the likes of *Sculpt 3D* or *TurboSilver* is like comparing a Ford Escort Cosworth with a Morris Minor. Like the Minor, *Sculpt* may be a classic but no 3D animator worth their salt would bother with it these days.

Despite the sophistication of programs such as *Lightwave* and its many competitors, Axiom obviously still feel that there's room in the crowded 3D market for an update of its popular 3D utility, *Pixel 3D Professional.* Version 2 still offers the same powerful bitmap tracing and text handling features as its predecessor but with the added advantage of full AGA colour support and a host of new features.

The most immediately striking new feature of *Pixel 3D Professional 2* (we'll refer to it as *PixPro 2* from now on) is its all-new user interface which borrows more than a few tricks from the Layout Editor employed by NewTek's *Lightwave.* Like *Lightwave,* the majority of the display is taken up by a large preview window which, even when no objects have been loaded, displays a wireframe of the ground immediately around your viewpoint.

## THE LIGHTWAVE COLLECTION

£29.95 ■ 24Bit Club 041-946 2191

Now that NewTek's wondrous *Lightwave* rendering package has finally hit the shelves in non-Toaster form, third party vendors have been quick to realise that there's a healthy profit to be made from *Lightwave* associated products.

The 24Bit Club, that bastion of all things rendered and generally 24-bit, have taken it upon themselves to launch the first in what they hope to be a whole family of products aimed at *Lightwave* users. The *Lightwave Collection Volume 1* is a massive collection of useful objects, scenes, Postscript fonts and textures which can be easily incorporated into your own *Lightwave* projects. Even if you don't own *Lightwave,* you may find this collection useful because most of the objects can be converted with a utility like *Pixel 3D Professional.*

For your £30, you get very good value for money. Opening up the modified video case reveals 10 disks, all of which have to be installed on to your hard disk before you can get access to those lovely 3D objects. Once this is done, however, you need never refer to the disks again. The 24Bit Club provide a single sheet of paper that tells you what files are placed where. Surprisingly, however, there's no catalogue of files – it's left down to you to find out what's new.

The range of new objects on offer is impressive. Subjects covered range from computer hardware, fruit and home furnishings to sharks, spacecraft and fighter jets. All are brilliantly modelled and easy to include in your own *Lightwave* scenes and animations. The Apache helicopter (pictured) is particularly good – within an hour we created an



This beautifully detailed AH64 Apache helicopter is only one of the many superbly modelled objects on offer.

animation of the helicopter banking and turning as it flew through the air with its rotors spinning.

A wide selection of scenes are included too – with all the objects and brushmaps needed to render them correctly. Although not that useful, they give you a taster of what's possible with *Lightwave.* More useful are the wide range of texture files although these, for space reasons, are stored as JPEGs and must be converted to IFF using a program such as *ADPro* before they can be accessed. Textures on offer include gold, sand and two types of leather.

## 80%
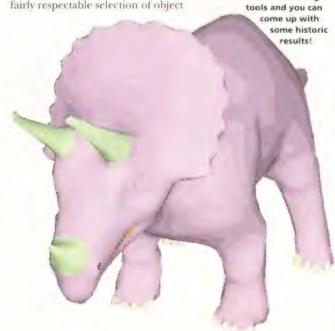
PixPro's new object requester allows you to view and even edit the hierarchy of an object made up of several smaller objects.

## POLYGON PAINTING

One of the most interesting new features of *Pixel 3D Professional v2* is its new 3D Painting tool which enables you to fill in polygons by clicking on them with the mouse pointer. It's a bit like a children's colouring book but instead of filling in a flat image, you're painting in 3D. OK, so it may sound strange but it does work surprisingly well although it's sometimes hard to select the exact polygon you want when several overlap.

3D Painting really comes into its own when you need to modify the surface colouring of an existing object. You could, for example, use the 3D Painting tool to colour the nose cone or fuselage of an aircraft. It's not that precise and you have to be careful not to recolour the wrong polygon because 3D Painting mode doesn't offer an Undo tool. If something goes wrong, however, all you have to do is to recolour the polygon in its original colour.



Ever wanted to alter the colour of any part of a 3D object simply by painting on to the object with the mouse? With *PixPro 2*'s new 3D Painting mode, that's precisely what you can do.

Axiom have obviously put a great deal of effort into gearing this latest release towards *Lightwave* users which, even if you're not familiar with using *Lightwave*, isn't necessarily a bad thing at all.

If you own an AGA-based Amiga then you'll be pleased to learn that *PixPro 2* can generate previews of any objects you care to throw at it in full 256 colours. What's more, *PixPro 2* now offers two new ZBuff rendering modes which attempt to add a greater feeling of three dimensional depth to your object previews using delicate dithered shading effects. As you'd expect, however, this greater level of colour detail does slow down the speed at which *PixPro 2* generates its previews – a particularly complex object, for example, can take several minutes to redraw.

**Axiom have increased** the number of file formats that *PixPro 2* can handle – whereas version 1 could handle 14 file formats, version 2 can now handle a total of 17 – these include objects from AutoDesk's *3D Studio* on the PC (*Lightwave*'s main rival), Postscript files and even *Lightwave* scenes. Quite why you would want to load *Lightwave* scenes into *PixPro 2* is beyond me – after all, *Lightwave*'s own Layout Editor is such an absolute dream!

Where *PixPro 2* really excels, however, is object manipulation. Version 1 offered a fairly respectable selection of object

Combine *PixPro*'s powerful 3D painting and surface editing tools and you can come up with some historic results!

editing tools but *PixPro 2* is a different ball game. Potentially the most useful of all its editing tools is the new Polygon Database Manipulator which is an updated version of the Data requester in version 1 of *PixPro*. From here you can perform all manner of wonderful polygon-related operations such as reducing the number of vertices or polygons in an object (handy if you're trying to use an object on a

### "PixPro 2's wide range of file formats make it the ideal companion to just about any rendering program"

machine with limited memory), divide, flip and double polygons and so on.

If you want to edit a hierarchical object (that is, an object made up of lots of smaller linked objects) then *PixPro 2*'s new Object requester is a real boon. It allows you to view the relationships between the components that make up an object. If you're not happy with any aspect of such an object, *PixPro 2* allows you to alter the relationship between a child and parent object such as linking a child object to another object within the hierarchy.

*PixPro 2* occasionally produces unpredictable results. Loading the *Lightwave* Apache helicopter on the previous page, for example, caused *PixPro 2* to go haywire when zooming in too far – the resulting object looked more like an Apache that had flown into a cliff face than the pride of the US airforce! Such problems are rare, however.

**3D painting mode** sometimes fails to use the currently selected colour too, which is annoying because there's no way of telling whether the correct colour is being used until you start painting. Axiom assure us that these bugs are being fixed so hopefully they should have been stamped out by the time you read this.

Gripes and hiccoughs aside, *PixPro 2* is an impressive utility at a good price. Although not quite as accessible as its predecessor, version 2 of *PixPro* is much more powerful – indeed, it's almost a rendering program in its own right! It's wide range of file formats make it the ideal companion to just about any rendering program. Whether you just dabble with *Imagine 2* or you're a serious *Lightwave* professional, *Pixel 3D Professional v2* is an essential upgrade.

# GASTEINER

## 126 Fore Street, Upper Edmonton, London N18 2AX
## Tel: 081-345 6000   Fax: 081-345 6868

### RAM FOR GVP A1230

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| 4Mb ... ... ... ... ... | £189.99 |

### ACCELERATORS

| Viper 68030 for A1200 | |
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| Viper Turbo ... ... ... ... | £150 |
| Viper + 1Mb ... ... ... | £179 |
| Viper + 2Mb ... ... ... | £219 |
| Viper + 4Mb ... ... ... | £279 |
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| G-force 040 for A3000/A4000 | |
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| G-force for A1500 - A2000 | |
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| 030 40MHZ ... ... ... ... | £679 |
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| Vidi 12RT ... ... ... ... | £134 |
| Vidi 24RT ... ... ... ... | £204 |

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| US Robotics | |
| Sportster 2496 + Fax ... | £109.00 |
| Sportster 14400 + Fax ... | £159.00 |
| Worldport 14400 + Fax ... | £259.00 |
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### ACCESSORIES

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| A1200 Clock ... ... ... | £15.00 |
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| 10 ... ... ... ... | £3.50 | £6.00 |
| 50 ... ... | £16.25 | £27.50 |
| 100 ... ... | £31.50 | £50.00 |
| 500 ... | £150.00 | £225.00 |
| 1000 ... | £270.00 | £400.00 |

### PRINTER

**CITIZEN**

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|---|---|
| ABC Col ... ... ... | £149 |
| 200 Col ... ... ... | £190 |
| 240 Col ... ... ... | £219 |

**HEWLETT PACKARD**

| | |
|---|---|
| 310 ... ... ... | £229 |
| 520 ... ... ... | £249 |
| 500 Col ... ... ... | £290 |
| 560 Col ... ... ... | £479 |

### SCANNERS

| | |
|---|---|
| Alfa Data 256 with OCR | £129 |
| Minimum 2Mb RAM + Hard Drive | |
| Alfa Data New 800 DPI ... | £113 |
| Power V4 mono ... ... | £115 |
| Alfa Data Col ... ... | £319 |
| Epson GI 6500 ... ... | £599 |
| Epson GT 8000 ... ... | £799 |
| Epson GT 9500 ... ... | £POA |
| Image FX ... ... ... | £99 |

### HARD DRIVE

| IDE Alfa Data controller and Hard Drive for A500, A500+, A2000, A3000 and A4000 with Option 8Mb RAM upgrade | |
|---|---|
| Controller ... ... ... | £79 |
| 120Mb + controller ... | £259 |
| 210Mb + controller ... | £279 |
| 420Mb + controller ... | £329 |
| 540Mb + controller ... | £399 |
| RAM for above | |
| 2Mb ... ... ... | £99 |
| 4Mb ... ... ... | £198 |
| 8Mb ... ... ... | £379 |

### POWER SUPPLY

| | |
|---|---|
| A500, A500+ ... ... | £34.99 |
| A600, A1200 ... ... | £34.99 |
| A1500, A2000 ... ... | £79.00 |

### 3.5" DRIVES EXT

| | |
|---|---|
| Amitec 3.5" ... ... | £57 |
| Power 3.5" ... ... | £50 |
| Power 1.76Mb ... ... | £89 |

### 3.5" DRIVES INTERNAL REPLACEMENT

| | |
|---|---|
| A500, A500 + internal | £39.99 |
| A600, A1200 | £39.99 |
| A2000 ... ... ... | £39.99 |

### WARP ENGINE FOR A4000 ONLY

| | |
|---|---|
| 28MHZ ... ... ... | £799 |
| 40MHZ ... ... ... | £1189 |

### GIGAMEN DISK EXPANDER

| | |
|---|---|
| Disk Expander ... ... | £29.95 |
| Gigamen ... ... ... | £39.95 |

### COMPUTERS

| | |
|---|---|
| A1200 ... ... ... | £279.00 |
| A1200 Combat Pack | £324.99 |

### HARD DRIVE A1200 + A600

| | |
|---|---|
| 40Mb ... ... ... | £99 |
| 65Mb ... ... ... | £134 |
| 85Mb ... ... ... | £149 |
| 120Mb ... ... ... | £189 |
| 240Mb ... ... ... | £259 |
| 2.5" Hard Drive including cable & software | |

### MONITORS

| | |
|---|---|
| Microvitec 1438 ... ... | £289 |
| Philips 8833 II ... ... | £239 |
| Microvitec 1440 ... ... | £399 |

### AMIGA A4000

| | |
|---|---|
| A4000/30 ... ... ... | £POA |
| A4000/40 ... ... ... | £POA |
| A4000/40LC ... ... ... | £POA |

### CD ROM DRIVES

| For A2000 - A4000 | |
|---|---|
| Tandon IDE CD-ROM controller ... ... ... | £65 |
| Mitsumi Dual Speed CD-ROM | £129 |
| For A1200 - A600 | |
| CD-1200 controller ... ... | £65 |
| Case with PSU ... ... | £99 |
| Mitsumi Dual Speed ... ... | £129 |
| A1200 Overdrive CD-ROM | £194 |
| SCSI CDROM for A2000/A4000 ... ... | £279 |

### RAM! RAM! A500, A600, A500+

| | |
|---|---|
| A500 1/2Mb ... ... ... | £14.99 |
| A500+ 1Mb ... ... ... | £19.99 |
| A500 1/2Mb with clock | £19.99 |
| A600 1Mb ... ... ... | £19.99 |
| A600 1Mb with clock ... | £34.95 |

### LOW COST A1200 RAM 32 BIT RAM WITH CLOCK

| | |
|---|---|
| 1Mb ... ... ... | £79 |
| 2Mb ... ... ... | £99 |
| 4Mb ... ... ... | £169 |
| 8Mb ... ... ... | £299 |
| Co-Pro for the above | |
| 25MHZ ... ... ... | £35 |
| 33MHZ ... ... ... | £69 |
| 40MHZ ... ... ... | £129 |
| 50MHZ ... ... ... | £149 |

### A4000 RAM

| | |
|---|---|
| 1Mb 32 bit ... ... ... | £29.95 |
| 2Mb 32 bit ... ... ... | £69.95 |
| 4Mb 32 bit ... ... ... | £129.00 |

### RAM FOR GVP 30PIN

| | |
|---|---|
| 1Mb ... ... ... | £29 |
| 4Mb ... ... ... | £129 |

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**How to Order**

When ordering by telephone please quote your credit card number followed by the expiry date and also your full name and address. If paying by cheque please make it payable to Gasteiner Technology. In any correspondence please quote a phone number and also a postal code. Please allow five working days for cheque clearance.

**Delivery Charges**

Please add VAT on all items. Small consumables and software items under the value of £59 please add £3.50 P&P. Other items except lasers, next day courier service £10 per box. Offshore and Highlands, please call for a quotation. In addition we offer the following express services: Saturday Delivery normal rate plus £15 per box, Morning, next day normal rate plus £10 per box. E & EO Prices subject to change without prior notice. All trademarks acknowledged.

# ProGRAB 24RT



Grab images in full 24-bit colour without ever having to hit Pause, with Harwood's new ProGrab 24RT digitiser.

## What? A real-time 24-bit frame grabber for just £130? Surely it can't be done! **Jason Holborn** put it to the test...

**A**miga digitisers have improved in leaps and bounds since NewTek launched their original *DigiView* in 1986. Back then digitisers were still relatively new inventions – *DigiView*, for example, cost well over £200 and could only grab from a (very) stable frozen video signal. Even then, *DigiView* took well over 10 seconds to grab a single image.

Despite *DigiView*'s inadequacies it is generally believed that those early *DigiView* grabs did more to promote the Amiga as a

graphics workstation than anything that Commodore's marketing team ever came up with.

Since then, video digitisers have advanced at a formidable pace. Most recently, Rombo have captured possibly the largest slice of the market with their successful range of Vidi digitisers. Available in a number of guises ranging from *VidiAmiga 12 AGA* (Rombo's entry level offering) to *VidiAmiga 24RT* (the bee's knees in 24-bit digitising), Rombo seem to have the digitisers market well

and truly sewn up. That is, they did until Gordon Harwood's new *ProGrab 24RT* hit the shelves...

As its name suggests, *ProGrab 24RT* is a real-time 24-bit colour video digitiser that can capture full colour images from any video source capable of providing a composite video signal – domestic camcorders, video recorders, LaserDisc players and so on. Surprisingly, *ProGrab* won't accept an S-VHS signal – a standard feature of all Rombo's Vidi digitisers – which does limit the potential image quality considerably.

**This minor indiscretion** aside, the *ProGrab* hardware is totally top-notch. Connecting to the Amiga's parallel port (a PCMCIA version is planned if your parallel port is already occupied), the heart of *ProGrab* is a 512k frame buffer (offering a resolution of 736x512 pixels) which allows the digitiser to freeze a single frame from the incoming video signal in its own frame buffer memory without the user having to hit the freeze button on their VCR. The frame buffer's contents are then sampled by a 14.318 MHz 8-bit A/D converter before being transferred into the Amiga's own screen memory.

Bundled with *ProGrab* is Harwood's own digitising software which controls all the digitiser's major functions. Once it's up and running, you're presented with a front end that – if the chosen font is anything to go by – has obviously been designed for the visually impaired. Being the impatient type, the first thing I wanted to do was to grab an image – after all, who wants to read a boring old manual when there's a sexy bit of hardware stuck in your parallel port? Unfortunately, grabbing an image is not quite as straightforward as it should be – unlike Vidi, there's no button labelled Grab – that would be far too easy.

Instead, you must first define an animation by telling *ProGrab* how many frames you'd like to grab at any one time. Even if you only want to grab a single frame, you must still define an animation –

## QUALITY CONTROL

Grabbing with *ProGrab* directly from a video tape produced fairly acceptable results although many of the images were rather blurry and lacked any real definition. To be honest, however, *ProGrab* isn't to blame – with even the most expensive digitisers, you're unlikely to obtain sharp digitised images from domestic VHS video tapes.

Actually, the VHS standard is far from ideal for video digitising because the quality you obtain from even the most capable VHS video decks lacks the sharpness and contrast of more professional video systems.

If you feed *ProGrab* a live video signal, on the other hand, the difference in the quality of the



This grab demonstrates the lousy quality that you'll get from most VHS video tapes. You really need to use a higher quality video source or a live source.

digitised images is astounding. When I grabbed from the composite output from a video recorder which was connected to an aerial socket it produced some very sharp images with plenty of contrast and detail. Unless you want to grab frames from your favourite soap operas, however, this feature probably isn't that useful (Vera Duckworth in 262,144 colours? What a frightening thought!).

Like all the other digitisers currently on the market, *ProGrab* really comes into its own when it's connected to a camcorder which is pointed at a live video signal. Camcorders produce perhaps the purest video signals that you could possibly feed into a digitiser, which result in the best possible grabs.

Trevor McDoughnut... er McDonald grabbed in full 256-colour AGA glory.


Thanks to *ProGrab*'s built-in frame buffer, even moving objects can be grabbed reasonably well.


This image demonstrates perfectly how good the quality of grabs from a television signal can be.

which, if you only want a single image, must contain just one frame (surely an animation with one frame is a static image!). Once this is done, *ProGrab* then sets aside the necessary memory to hold the requested number of frames (which, if you grab in full colour can take up a huge amount of memory.).

**Once you've told** *ProGrab* how many frames to grab, you're automatically taken to the grabbing screen. Running along the bottom of this screen is the *ProGrab* control panel which holds all the various gadgets which control the digitiser's operation – brightness and contrast levels and so on. In the centre of this panel is a small rectangular window which – when you select the Preview option – displays a real-time greyscale preview of the incoming video signal at a rate of about four frames per second.

Running along the bottom of this control panel are a set of VCR-like buttons which activate the grabbing process. Clicking on the REC (record) button forces *ProGrab* to start grabbing frames – if just a single frame is to be grabbed, then it's displayed as a full screen greyscale immediately behind the control panel. If you're grabbing more than just a single frame, however, the screen is blanked while *ProGrab* digitises the requested number of frames into memory.

In order to view your image in full colour, all that is required is a single click

on the Decode button and *ProGrab* then converts the 24-bit image data held in memory to the requested screen mode. *ProGrab* supports the full range of Amiga screen modes including those offered by the AGA chip set. You can, for example, decode frames into either 256 colours or – for the best possible results – 262,144 colour HAM8 mode. If you own a 24-bit card, *ProGrab* even allows you to save its raw image data to disk as a 24-bit IFF.

The *ProGrab* software also includes fairly rudimentary image processing tools – or filters as *ProGrab*'s designers call them – which are designed to aid the process of cleaning up an otherwise less than perfect grab.

The only real problem with these filters is that once you've applied a filter to your image data, you're stuck with the results. Which is not necessarily a bad thing if the filter has improved the quality

of your grab, but it's a real pain if the quality is degraded.

*ProGrab* certainly isn't a product that is going to pose any real threat to professional video digitisers like MacroSystems' *V-Lab*. What it does offer, however, is a quick and easy method of obtaining some very good quality grabs at an attractive price.

**Although Rombo's entry** level digitiser, *VidiAmiga 12 AGA*, is around £30 cheaper than *ProGrab*, comparisons are better drawn with Rombo's more expensive 12 and 24-bit RT digitisers, both of which offer a similar specification. In terms of price, however, neither product comes close – even *VidiAmiga 12RT* costs £70 more than *ProGrab*. But *VidiAmiga 24RT* is more than double the price of *ProGrab*. I reckon Rombo will be rethinking their pricing policy soon...


Once you've found the section of footage that you want to grab using the preview display, clock on to the Rec button which grabs your image into memory.

## FUN WITH TELETEXT

Bundled with the *ProGrab* software is a separate utility that claims to transform the digitiser unit into a Teletext adaptor. Unfortunately, due to differences in the way Teletext information is encoded into video signals between different countries, this aspect of the program didn't actually work.

Harwood claim that their engineers are hard at work recoding the Teletext software to cope with the signals transmitted by the BBC and ITV networks so this feature should be fully working by the time you read this.

## PROGRAB 24RT

**DISTRIBUTOR**
Gordon Harwood 0773 836781

**PRICE**
£129

**SYSTEM REQUIREMENTS**
1Mb RAM

**SPEED** ●●●●○
Grabbing a frame is very rapid but converting it to full colour takes a little more time.

**MANUAL** ●●●●○
A no-nonsense tome that takes you through the basics without getting too bogged down in detail.

**ACCESSIBILITY** ●●●●○
Grabbing a single frame is not quite as straightforward as it could be.

**FEATURES** ●●●●●
Apart from the lack of S-VHS support, *ProGrab* is very well endowed.
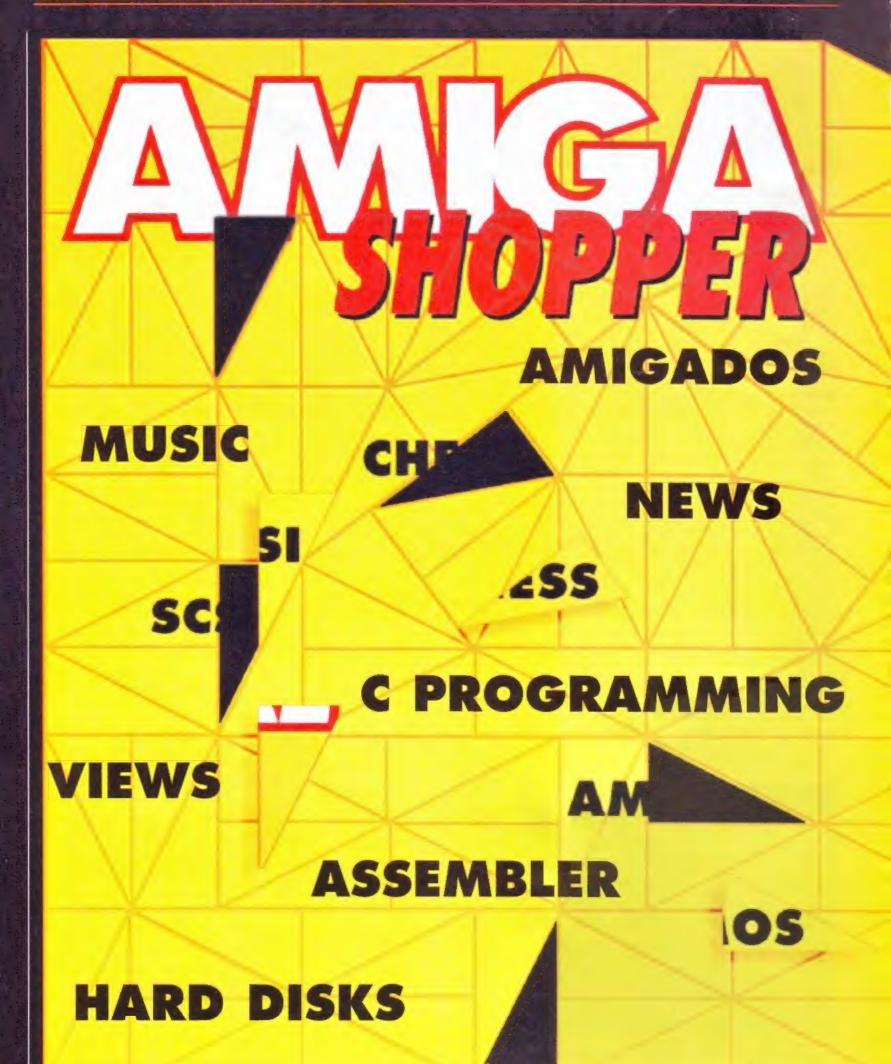
**VALUE** ●●●●○
Costing £70 less than its closest rival, *ProGrab* is an absolute bargain.

"For sheer value for money, *ProGrab* cannot be beaten."

## 92%

# AMIGA
## SHOPPER

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VIEWS

AM

ASSEMBLER

OS

## HARD DISKS

**Do you often spend hours searching for an elusive magazine article? Angus Neilsen looks at a utility that could make life easier.**

If you've got a large collection of written information to manage, *Indexer 2* makes it easy to find exactly the right article.



# Indexer V2

**D**atabases have become more and more common, but as they have grown in sophistication and complexity, people with little or no computer skills are finding them increasingly difficult to use.

*Indexer v2* is a very simple utility. It has one menu, a set of on-screen controls and that's about it. It's not designed to hold detailed records – it's designed for simple lists of collections. So if you enjoy collecting things, you will find this program very useful to keep track of what you've got with the minimum of fuss.

*Indexer* may sound complicated, but it's no hassle once you sit down and play with it. First, you divide up your main collection into 14 or less fields. These 14 categories are used for all information searches, and collectively the program calls them the DMI – short for Dynamic Menu Index. If you want more than 14 fields, you will need a separate floppy disk.

**Each of these** 14 indexes covers one main collection subject. Each index is further subdivided into nine smaller categories, so a video index could have a children's category, action/adventure, sci-fi, romance, B-movies and so on.

Nine categories may not sound enough, but each sub category can have up to 54 separate sub-sub indices. The point is that these main nine headings are always displayed on-screen, so the limitation ensures that you organise your indexes properly.

Everything is displayed on one screen and to set up an index you just play around with one menu. The other nine menus are used for selecting one category from the nine which make up the main index. You select Search DMI, click on one of the nine headings, then use the right mouse button to select an index. Once

I decided to knock up a quick index for the odd bits of electronics I've gathered over the years. It took just minutes, although detailing which bin everything was in took a lot longer.

you're at the index, just use the cursor keys to move around.

Included on the *Indexer* disk is an index for *Amiga Format*, showing all the games we've ever reviewed, cheats, hints and all the serious stuff, listed by issue and page number. If you search for a particular name – *Gods*, for example – in just a few seconds you see the game was demoed on the *AF22* Coverdisk, then it was reviewed in Issue 23, and finally the cheats for the game appeared in Issue 28.

Admittedly you do have to spend time actually setting up your indexes, but once that chore is out of the way, *Indexer* is first class at displaying the information you require. The whole emphasis is on making life simple – you don't have to spend hours leafing through a massive manual. The *Indexer* manual consists of six sides of A4.

It's included on the disk as well, and contains just about everything you need to know to get started.

There are a few drawbacks to this version of *Indexer*. It only works on Workbench 2 and above. Also, it's limited to about 1,500-2,000 entries per disk. You can put more entries in, but searches start taking a lot longer. It's not easy to browse through an index – it forces you to search through in a methodical way. And £36 is quite expensive compared to Shareware databases like *BuddBase*.

Even considering its shortcomings, *Indexer v2* has one underlying strength – it's almost idiot-proof. If you keep getting hassled to organise your collections, buy this program. It should save you hours in the long run, and as the old saying goes, time is money.



## INDEXER V2

**DISTRIBUTOR**
Pyramid Productions,
En Ramounas,
11320 Montferrand, France.
(France) (33) 68 60 12 64

**PRICE**
£36.00 (300F)

**SYSTEM REQUIREMENTS**
Workbench 2

**SPEED** ● ● ●
Slow while loading or sorting, but speeds up when searching.

**MANUAL** ● ● ● ●
Clear and concise in content, it just looks scruffy.

**ACCESSIBILITY** ● ● ● ●
Very easy to get to grips with, because there's not a lot to it.

**FEATURES** ● ● ● ● ●
It only does one job, but does that job very well.

**VALUE** ● ● ● ●
You can get organised for the cost of a game.

"**Typical of a new generation of small, dedicated programs rather than large, all singing and dancing monsters.**"

# 74%

**Angus Nielsen** takes a look at a spreadsheet program that would be ideal for use in a small business.

The main use of *TurboCalc* is to take in tables of data and present information from that data in a graphical form. The data can then be printed out via a graphics printer.



T urboCalc has been available in Germany for some time and version 2 was released there last year. The best spreadsheet program you can get for the Amiga is *ProCalc* from Gold Disk, who won't be developing any further versions. But development for *TurboCalc* is continuing.

*TurboCalc* was written to take advantage of Workbench 2 but it still runs on 1.3 Amigas. The toolbar is stuffed with gadgets and menu options, but all the graphical stuff is only there to make it easier to start – if you want to work fast, use the keyboard.

# TurboCalc V2

The step-by-step tutorial included in the manual makes getting started easy for people new to spreadsheets. However, it does eventually dump you in the deep end.

The maximum sheet size is 699x 999,999 cells, although to have a spreadsheet using every possible cell would need a huge amount of memory – I wouldn't recommend *TurboCalc* for large projects because that isn't its main strength. The good part of *TurboCalc* is that it offers flexible editing and printing options. It comes into its own when producing small, well-presented spreadsheets.

Unfortunately, *TurboCalc* is a bit buggy. The spreadsheet half of it is fine, but the features you only use occasionally haven't been tested properly. I asked for a display

with 16 bitplanes (very dumb) and was thrown back out to the Workbench screen. It takes time to appreciate what *TurboCalc*'s sensitive points are, and not do silly things.

This is partly due to the complexity of *TurboCalc*, which offers extensive *ARexx* and macro support. The manual has 90 pages explaining *TurboCalc*'s *ARexx* functions – they allow you to write *ARexx* scripts which can automate many of *TurboCalc*'s more complicated functions.
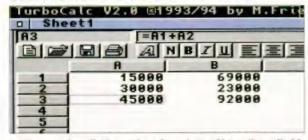
*TurboCalc* can import files from *ProCalc* in SYLK format (a general interchange format for spreadsheets) or CSV – Comma Separated Values. Total import compatibility is not guaranteed – you can import raw data and basic cell calculations, but a lot of formatting instructions do not

translate properly from other systems. *TurboCalc* can also write in SYLK and CSV, but you can't export in *ProCalc* format.

Where *TurboCalc* scores heavily is in presentation. It can use CompuGraphic fonts and most of the tweaking functions – such as justification, prefixes and suffixes for different currencies and typestyles – are on the toolbar. It also has good database facilities: it's easy to drag a block of data from cells and set up a database from them. If you want to be smart, you can set up sheets as operator-only, so input is limited to a specific number of cells.

*TurboCalc* isn't a great program, but considering what you get for your money, it's a bargain and is ideal for small business use.

## WHAT IS A SPREADSHEET?



In this example, cell A3 contains a formula to add together cells A1 and A2. Simple stuff.

Spreadsheets are computer programs which let you manipulate huge grids. Each box (or cell) in the grid can include a number, an equation which manipulates the contents of other cells, or a piece of text to help explain what the numbers are.

The everyday tool of accountants, the main use of spreadsheets is for keeping track of money. They are used to gain important information from large wads of data, like how much money you're making. Or, more typically, losing.

## TURBOCALC V2

**DISTRIBUTOR**
Power Computing
0234 273000

**PRICE**
£59.99

**SYSTEM REQUIREMENTS**
Workbench 1.3 up, 1Mb

**SPEED** ●●●●●
Quite zippy without interlace, but I would recommend a 68030 processor for interlace work.

**MANUAL** ●●●●
It's very wordy and jumps about, but the index is comprehensive so it's pretty good.

**ACCESSIBILITY** ●●●●●
Very nice front end – encourages you to play with it and learn.

**FEATURES** ●●●
Good, but no AGA 256-colour support, which limits the diagram and chart potential to 16 colours.

**VALUE** ●●●●●
Good value for occasional and educational use.

"A spreadsheet that's fast and as simple or clever as you want it to be."

**84%**

# Put your life in order with the full family

# INDEXER

## PYRAMID MAKES YOUR AMIGA WORK FOR YOU!

```
« PYRAMID PRODUCTIONS »        * AMIGA FORMAT INDEX *    A CORT ©1994

          I N D E X           ITEMS    SAME DMI OR          SEARCH DMI
    AMIGA FORMAT 1989 - 1993            SEARCHALL OR        SEARCH ALL
                                47      CHANGE CATEGORY
                                                            ENTER DMI
                                                          ENTER NEW INDEX
    INDEX      NO  PAGE        « ITEM »                      EXIT MODE
  MUSIC         6  153  Sound Trap 3 - Sound Sampler
  MUSIC         8   95  Master Sound - Sampler            1   SCREENPLAY
  MUSIC         8   96  Sequencing Tutorial
  MUSIC         9   87  Music-X Junior                    2   COVERDISK
  MUSIC        11   87  Quartet
  MUSIC        11   89  Soundblaster - Stereo Speakers    3    SOFTWARE
  MUSIC        12   27  Bars & Pipes
  MUSIC        13   97  Tiger Cub                         4    HARDWARE
  MUSIC        13  100  Copyist
  MUSIC        13  105  TFMX Soundtool                    5  PUBLIC DOMAIN
  MUSIC        14   88  Brimble Beats
  MUSIC        16  167  Trax (Sequencer)                  6  GAMEBUSTERS
  MUSIC        16  173  Sound Express (Sampler)
  MUSIC        17  100  Technosound - Sampler             7  AMIGA ADVICE
  MUSIC        18  223  Bars % Pipes Tutorial
  MUSIC        19  136  Harmoni - Midi Sequencer          8  PROGRAMMING
  MUSIC        20  167  Funlab - Complete Music System
                                                          9   FEATURES
```

**TAKE ADVANTAGE OF** this incredible never-to-be-repeated offer (**RRP £36.99**) to organise all those personal items in the home that you need to list; categorise and find instantly.

Use *Indexer* to compile a database of your albums, disks, CDs, stamps, recipes, news items, magazines, videos, books, historical references, chemical formulae, labels, gardening planning, photos, household insurance items, knitting and sewing patterns... The list is only limited by your own needs and ingenuity.

Version 2 of *Indexer* offers even more facilities: installation on to a hard disk, the

A PYRAMID PRODUCTION

AMIGA FORMAT INDEXER

ability to delete a dynamic index, the facility to put the DMI in alphabetical order, as well as many other functions.

---

## Amaze your friends with
# MAGIC NUMBERS
### using the intuition of your Amiga.

**WITH MAGIC NUMBERS** you can read your friends' minds, do the Magic Nine trick, pick the football results, play Pontoon, roll dice, call the Bingo sessions, pick a winning horse, pick lucky numbers for raffles, check your biorhythms, practice the art of numerology by using numbers to predict what the future holds for yourself and your friends; and much, much more.

## FIND ALL THESE ITEMS ON ONE FUN-PACKED PROGRAM

*Magic Numbers 1* is the first in a series of disks consisting of a compendium of games, trivia and esoteric items which depend on the chaotic patterns found in nature and on formulae created by random mathematical projections.

*Magic Numbers 1* is also an ideal tool for fund-raising at school fetes and charity bazaars, for example, and it can easily be set up on stalls to attract punters.

If you are interested in the esoteric, the editors of *Magic Numbers* are undertaking serious life-pattern studies into the paradigm of numbers. We would like you to participate in a data bank and welcome suggestions for inclusion in future editions.

# Picture Perfect

**Graeme Sandiford** rates and reviews three commercial image processors and picks the top four PD programs which can help you alter your images.

The difference between reality and perceived-reality can be deceptively large. Today's computers make short work of deceiving the human mind – fooling it into believing an artificial sound or image is real. Modern computer imaging techniques are especially impressive, with the right hardware and software, you can alter the appearance of an image drastically. Such is the level of sophistication, that you can make

← alterations and modifications without anyone ever noticing.

More often than not, the people behind the adverts we see each day on TV use these same tools to do the exact opposite – they change normal, everyday images into something unusual or humorous, in the hope that these antics are enough to convince us to buy their products. Without a doubt, the impact that images can create is a very strong one.

The same technology is available to Amiga users. Armed with just an Amiga, the right software and a modicum of talent it's possible to produce truly stunning images. As you've probably got an Amiga already and there's very little we can do about talent, this article will help you decide which of the Amiga's excellent image processing packages is the best for your needs.

We'll take a look at three commercial packages – *ADPro 2.5*, *ImageFX 1.5* and *Personal Paint 4*. And to prove that you don't have to spend a small fortune to get good results, we'll also take a look at the best Public Domain image processors.

**However, you should** be warned that while these packages can make creating good images easier, like any powerful software, they require a substantial amount of memory to run. The more memory you have on your machine the more you can do with these programs (the image on the opening page of this piece was created on an Amiga with 18Mb of memory). But what can an image processor do for you?
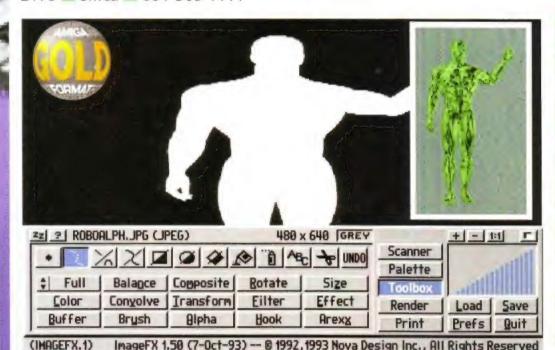
Image processors are great for creating composite images – an image that combines two or more images into a new one that contains elements of the others. This technique is a great way of creating unusual or even surreal images and is probably the main area in which computer image processing has advantages over more traditional methods.

Image processing's potential goes beyond simple compositions. You can create totally new looks and effects that are not possible in the real world, by using mathematical filters and matrices. Almost as a by-product, image processors tend to be able to save images in several different file formats and can therefore also be used as file converters.

Image processors have yet another use – they can enhance images. If you have access to a scanner you can easily improve existing pictures by sharpening them up using filters. With an image processor an an Amiga your imagnation can run riot. Let's take a look at the best commercial and PD programs available ⬆

# ImageFX 1.5

£179 ■ Silica ■ 081-309 1111



Here's *ImageFX* in action. The greyscale image is an Alpha channel produced by *Lightwave 3.5*. The Alpha channel was used to smoothly composite the figure (inset) with the picture of London shown on the first page.

The *ImageFX* program, unlike *AdPro*, sports an almost paint package-like front-end which is similar to *PhotoShop* on the Mac, but thankfully, a lot cheaper. This interface is a plus, because it provides easy access to features without obscuring the image you are working on too much.

All of the program's tools are represented by icons on a control panel which can be toggled on and off with the right mouse button. It can also be interlaced to enable you to see more of the screen. The screen that you work on is actually a preview of the 'real' image. There's no need to feel cheated though, the program works on 24-bit image data (like *ADPro*), but you can take advantage of true-colour images without an external display device.

This means you don't have to worry about the number of colours you use and you can add as many brushes as you like with different colour palettes. To view the image as it will finally appear, you need to render it. It doesn't take as long as a ray-tracer because *ImageFX* converts the image down to whatever depth your machine can support. Unfortunately, the conversions to AGA 256-colour mode are far from impressive – *ADPro*, *Personal Paint* and *DPaint*, do a better job. There's also no support for HAM8 displays or file-saving. However, *Viewtek* is supplied and can be used to convert images to HAM8.

As well as looking like a paint package, *ImageFX* has many of the tools you would associate with that type of program. It has the usual Drawing and Fill tools and one of the sexiest airbrushes around. When it comes to file formats *ImageFX* matches *ADPro* and just about comes out top. Like *ADPro*, it takes a modular approach to loader and saver files. A PD PhotoCD is now also available – see the boxout on PhotoCD on page 120. The battle between Operators (or Convolutions) is also quite close. But *ImageFX*'s custom filter and ability to apply operations to limited regions tip the scales in its favour.

However, where *ADPro*'s butt gets a kicking is in the selection department. *ImageFX* can select, and then operate exclusively, any part of the buffer using several methods. You can select by using the Fill tool – great for irregular shapes – the Polygon tool can select areas by drawing a continuous line and you can even select an area using the Freehand tool. The cut and paste options are just as comprehensive.

*ImageFX is the* best image processing package on the market – it's powerful, expandable, infinitely controllable and intuitive.

**FILTERS** ●●●●●
*ImageFX* comes with a wealth of filters and hooks that can produce incredible effects.

**SPEED** ●●●●●
While not that much faster than *ADPro* on most operations, its Preview mode means you can work quickly.

**MANUAL** ●●●●
Although it's easy to follow, it could explain some areas in a bit more in depth.

**FEATURES** ●●●●●
As many different functions as you could wish for.

**VALUE** ●●●●●
This program is great value considering its powerful and controllable tools.

**"Move over *ADPro*, ImageFX is now definitely the best Amiga image processor."**

**94%**

# ADPro 2.5

**£103.70 ■ Meridian Software Distribution ■ 081-543 3500**

The purple area of this image has been changed to aid composition. When composited with another image this area becomes transparent.

**A** SDG's *Art Department Professional*, has been the favourite son of the Amiga's image processing world for some years now. However, recently it has encountered some serious competition, particularly in the shape of *ImageFX*.

If you are used to a paint package interface, then you'll find *ADPro's* interface completely foreign. It offers the greatest contrast of the programs reviewed between image processors and paint packages and makes no pretence of being anything other than it is – an image processor.

Yet, once you become familiar with its way of working you'll find a host of powerful features. It is also one of the most adaptable image processors. The interface is actually quite simple, consisting of several panels. The main panel is used for general functions such as opening, saving and rendering files and it also displays information about the buffer that is being worked on as well as the rendering screen.

The program's other functions can also be accessed by opening lists and you can open the Loader or Saver lists when you wish to open or save a file of a particular format. One of *ADPro's* strong points is the number of file formats it can

load and save. Three of the Loaders merit special mention. The Backdrop Loader can create background patterns from a maximum of four colours. The Backline Loader produces a similar effect, using lines. The program can now load *Fractal 2000* images directly.

One of *ADPro's* best new abilities is its control over compositing images. When loading images you can choose to replace the existing buffer or composite the new with the old. Using the composite option you have extensive control over where the images are placed, the degree they are mixed and their transparency. The transparency controls can use any colour – or range of colours – you wish, or even an Alpha Channel.

*ADPro* has a powerful range of Operators that alter and even enhance an image. These, as well as the loaders, are in a modular form so you can

add to the range of functions and file formats that are supplied.

*ADPro* has certainly been revamped and beefed up and the wide variety of graphics tools that are compatible with it help ensure that it remains a popular program.

**FILTERS** ● ● ● ●
*ADPro* filters have always been its strong point and now it has even more.

**SPEED** ● ● ● ● ●
This program is no slouch, although like most image processors it really needs a fast machine.

**MANUAL** ● ● ● ● ●
The manual is lucid and has some good tutorials and demonstration images.

**FEATURES** ● ● ● ●
While there is no lack of features it lacks *ImageFX's* degree of control.

**VALUE** ● ● ● ● ●
Although it's not exactly cheap its functions justify its price.

"Although ADPro has been relegated to second place, it's still incredibly powerful."

## 90%

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# Personal Paint

**£69.95 ■ Ramiga ■ 0690 770304**

**Y**ou are probably wondering what on earth *Personal Paint* is doing in an image processor round-up? Well, the fact of the matter is that although it's primarily a paint package, it actually has some image processing capabilities.

As you would expect, *Personal Paint* has a paint program-like interface. It's very similar in layout to *DPaint* and has all the usual painting and drawing tools. But unlike other paint packages it can apply filters using its image processing tool. If you select the image format option on the Project menu you can perform a number of operations on the whole image.

You can also perform operations on a limited region by simply clicking on the Limited Region tool – clicking on its icon more than once changes the mode of operation. You can process an area as defined using the Marque mode – drawing a square around an area. The Freehand mode is useful for creating irregularly shaped areas. The Final mode uses the current brush as a template, which can produce some very interesting effects.

*Personal Paint* is also great at adjusting colour ranges. You can alter a picture's palette by changing its colour, contrast, brightness and RGB

This Boticelli has been given an ethereal appearance by applying two filters to a limited region. The filters were Embossed, top-left and Negative, bottom-right.

values. It can also reduce the number of different colours that the image uses, and does it very well. Although it can load 24-bit images, *PPaint* doesn't do it internally with 24-bits and its file format support is limited compared to *ADPro* and *ImageFX* – it can only save files as IFF, GIF, PCX or as C source code.

Despite its limitations, *Personal Paint* can still be used effectively as a budget image processor.

**FILTERS** ● ● ● ●
*Personal Paint* has some very good filters and its custom filter can be used to create your own.

**SPEED** ● ● ●
Unfortunately, *Personal Paint* is not in the same league as the others when it comes to speed.

**MANUAL** ● ● ●
A little vague and could do with some good tutorials.

**FEATURES** ● ● ● ●
Excellent for a paint package, average for an image processor.

**VALUE** ● ● ● ● ●
Not as powerful, but cheaper than either *ADPro* or *ImageFX*.

"It's primarily a paint package, but PPaint still sports some excellent tools."

## 80%

## BlackBoard v3

*BlackBoard* started life as a PD program, but has recently been upgraded to version 3 and become Licenceware. Like its commercial counterparts, *BlackBoard v3* takes a modular approach to adding filters and functions. Almost every function is loaded as a separate module and guidelines are provided so programmers can create their own modules.

The program comes with a surprising number of functions. It can perform most of the common convolutions such as embossing effects and pixelation. However, it even has its own morphing package as well as independent bulging and warping modules. In the PD world *BlackBoard* is the premiere image processing program.

**90%**

## ImageStudio 1.01

*ImageStudio 1.01* is the new kid on the PD image processing block. It's a Shareware package that seems to have been heavily influenced by *ADPro 2.5*. Its interface comprises several windows, one for a Preview of the image being operated on, one for the available Convolutions and another for the built-in Effects such as negative. It also has a window for controlling the image's Balances. These include Brightness, Contrast and Gamma. For each of them you can choose which of the RGB channels are affected. You can also create your own custom Convolutions. It's a promising package which is just pushed into second place by *BlackBoard*.

**88%**

## Digital Illusions

*Digital Illusions* is another old-timer, although not quite as long in the tooth as *HAMLab*. It takes the same button bank approach, with buttons for the various image operators and functions.

Its image operators include scaling and cropping options. It can also flip and rotate images and adjust their brightness and has a number of interesting filters such as spiral effects and starbursts. Surprisingly it has an animation editor too, which, although relatively simple is useful. However, the program is badly let down by its old-fashioned interface and annoying file requester.

**78%**

## HAMLab Plus

This program is among the oldest of the PD packages and has proved popular for some time. Its design is reminiscent of older version of *ADPro*, with banks of buttons for different loading and saving files, adjusting colour levels and screen modes. The program also has a useful crop function for reducing an image's size. Unfortunately, *HAMLab Plus*'s age is starting to tell – although it is still a good program its interface is cumbersome and not very adaptable. Not enough file formats are supported and *HAMLab Plus* doesn't have the features to compete with newer programs.

**67%**

## IMAGE FORMATS

In the graphics world images are not saved in the same manner, in fact there are almost as many formats as programs. A good image processor should support as many of these as possible. Often, they have unique advantages and the more formats that are supported the more files you have access to. Here is a brief description of some of the most common.

**JPEG** – (Joint Photographic Experts Group) probably the most important file format. Files are highly compressed and of 24-bit quality.

**IFF** – (Interchangeable File Format) the standard file format of most Amiga graphics, it's quite a large file format and support several Amiga screen modes.

**TIFF** – (Tagged Image File Format) in a way this is the PC and Mac equivalent of IFF. Files are usually large and supports several colour depths from 1-bit to 24-bit.

**COMPUSERVE GIF** – (Graphic Image File) usually referred to as just GIF. Compressed format for files up to 8-bit quality.

## PHOTO CD

Photo CDs are CD-ROMs that contain scanned images of photographic quality. To transfer your photographs to Photo CD format all you need to do is take in or send a 35mm camera film to a film developer that supports this process (like Boots). However, you need special software to view or convert these images. You'll also need a multi-session capable CD-ROM drive, because Photo CDs are multi-session discs. This is so you can add photographs in more than one session.

## IMAGE COMPOSITION

This is one of the advantages of digital images, you can combine two separate images into one. Most programs either use Alpha channels or colours to do this. Alpha channels are 8-bit greyscale images that usually define the shape of a foreground image. They can be used to create a variety of effects or to make seamless compositions. These two methods make an area of an image transparent so that parts of the image underneath show through. If the background colour is chosen to become transparent then any areas filled with this colour let the other image show through. With practice, this can be used to startling effect.

## CONVOLUTIONS

Also known as filters or operators, this tool can mathematically distort an image. It can be used to emulate natural effects such as oil painting and mosaic tiling or create completely new ones. A custom filter is a good function to have, as you can create your own effects. As you can do this by simply adding a few 0s or 1s in a matrix you can even borrow effects from other programs.

## TABLE OF FEATURES
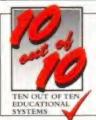
| PROGRAM | COMPOSITION | NO. CONVOLUTIONS | CUSTOM CONVOLUTIONS | MORPHING | BRUSH MANIPULATION | VIRTUAL MEMORY | AREXX | SCALING |
|---|---|---|---|---|---|---|---|---|
| ADPro 2.5 | Yes | 19 | No | No | No | No | Yes | Yes |
| ImageFX | Yes | 20 | Yes | Yes | Yes | Yes | Yes | Yes |
| Personal Paint | No | 16 | Yes | No | Yes | No | No | Yes |

| PROGRAM | AGA SUPPORT | ANIMATION | SCANNER SUPPORT | TEXT? | JPEG | TIFF | PCX | FLI | CDXL | TARGA | SGI | PRICE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ADPro 2.5 | Full | Yes | * | Yes | Yes | No | Yes | Yes | Yes | No | No | £103.70 |
| ImageFX | † | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | Yes | Yes | £179 |
| Personal Paint | † | No | No | Yes | No | No | Yes | No | No | No | No | £69.95 |

* Scanner support for ADPro is available separately     † Limited AGA support – No HAM8

# GROUND ZERO SOFTWARE

## NEW TITLES
LISTING ALL THE NEW PD SOFTWARE FOR THIS MONTH

### SLIDESHOWS
S126-S127 (2 DISKS) THE GIRLS OF ERIC SCHWARTZ - Multimedia slideshow featuring the seductive cartoon characters of this famous Amiga animator. •1.5 MEG•
S128 NEVER LIKED LYNX - Slick slideshow. Fantasy art.
S129 CINDY CRAWFORD SS1 - The sexy super model.
S130 CINDY CRAWFORD SS2 - Volume 2.
S131-S132 (2 DISKS) BODY SHOP 6 •A1200 ONLY•
S133-S134 (2 DISKS) BODY SHOP 7 •A1200 ONLY•
S135-S136 (2 DISKS) NLP RENDERSHOW - Captivating raytraced Sci-Fi pictures.

### DEMOS
D204 FUSE - One of the few new demos that work on Amiga's other than just the A1200. Pretty decent at that. •NOT A500•
D207-D208 (2 DISKS) HYSTERIA - New demo from Analogy.
D205-D206 (2 DISKS) LOVE - Hot new demo from Fairlight. One of the best this year. •A1200 ONLY•
D209 ILEX - Highly original demo from Mystic. •A1200 ONLY•
D210 GO WITH THE FLOW - Aga demo with an amusing interactive graphic adventure section. •A1200 ONLY•
D211 7th HEAVEN - Exciting techno trackmo. •A1200 ONLY•
D212 PEE WEE - Not long but very sweet! •A1200 ONLY•
D213 HARD DAY - A promising little number. •A1200 ONLY•
D214 INTERFERENCE - Another hit from Sanity. •NOT A500•
D215 MR MONKEY - Look out for the dancing Monkey!! •A1200 ONLY•
D216 EXPLORER - Classic routines. •A1200 ONLY•

### MUSIC DEMOS
M148 DANCE WAR - Great high energy music.
M153 EXTEMPORED - High quality atmospheric music.
M149 LUFICER - "CYBER" PUNK ROCK - Inbetween sacrifices (Joke?), this guys a pretty talented musician.
M150 LUCIFER - PANDEMONAEON -More tunes from the pits of hell.
M151-M152 (2 DISKS) AMIGADEUS II - Synthesised recreations of five Mozart compositions. By Rob baxter. •A MINIMUM OF 1 MEGABYTE OF CHIP RAM IS REQUIRED•
M154-M155 (2 DISKS) BLUES SYMPHONIES - Haunting atmospheric music. •A1200 ONLY•

### ANIMATIONS
A178 SUICIDE MAN 3 - Latest installment in this sick series. OVER 18'S ONLY PLEASE. •REQUIRES 1.5 MEG•
A176-A177 (2 DISKS) SENSIBLY SOCCOR - Amusing cartoon based on Sensible Soccer. •REQUIRE 1 MEG•

### MISCELLANEOUS
T67-T68 (2 DISKS) LUCIFER'S BOOK OF SHADES - Secrets from the occult. OVER 18'S ONLY
T69 LUCIFER'S WICKED GRIMOIRE - More information and practices of the occult. OVER 18'S ONLY
T70 TEAM FOCUS: TOTTENHAM HOTSPUR - Info on the team and players

### EDUCATION
E90 ROME - Architecture and entertainment of ancient Rome. Subjects are covered at GCSE level. Shareware.
E91 SMARTY DEMO - Two games for children with Autism.
E92-E93 (2 DISKS) APOLLO 11 - Multimedia Hyperbook on the historic man on the moon space race.
E94 RUNEMASTER - Rune stone caster, predictor and translator.
E95 KIDS DISK 5 - Educational games for kids by D Moran

### GAMES
G347 THE SWORD OF YIGG - Graphical RPG. Good.
G343 HAJIME CARDS - Erotic cards for Klondike Deluxe.
G344 SHEPHERD - Incredible Populus genre clone. A superb God game not to be missed. Will blow your mind •A MINIMUM OF ONE MEGABYTE OF CHIP RAM is required•
G345 HOI AGA Remix - Fantastic multi-leveled platform game. You won't believe how good this is. •A1200 ONLY•
G346 SENSITIVE - Shareware clone of the C64 puzzle game.
G349 GENERA 5 - Level one of this incredible shareware game. Looks a bit like Another World and Flashback.
G350 THE UNUSUAL CASE OF DOCTOR STRANGE - Platform game with great graphics and humour •NOT A500•
G348 KNIGHTS v2.5 - Great 2 player medieval dungeon maze adventure game with loads of features.
G351 ANIME CARD SET - Cartoon Manga style card set for Klondike Deluxe
G352 TREK CARDS - Star Trek cards for Klondike Deluxe.
G353 ANT WARS 1.9 - Lemmings style player Vs. player war game.
G354 ORBIT - Four Light Cycles genre variations.
G355 NANO FLY - High tech arcade puzzle game.
G356 THERMO NUCLEAR WARFARE - 2 player wargame.
G357-G358 CYBERTECH CORP (2 DISKS) - Brilliant Alien Breed type game. •A1200 ONLY•
G359 ZOMBIE APOCALYPSE - Blast the Zombies to pieces. Lots of GORE. •A1200 ONLY•
G360 KNIGHTWOODE - 2 part text adventure.
G361 SPECTRUM GAMES VOL.1 - Spectrum games. Requires emulator. Snapshot format.
G362 SPECTRUM GAMES VOL.2 - As above.
G363 SPECTRUM GAMES VOL.3 - As above.
G364 SPECTRUM GAMES VOL.4 - As above.

### UTILITIES
U434 VIRUS WORKSHOP v3.8 - Recognises 197 (and more) file viruses and over 285 bootblock viruses. Essential tool for ALL Amiga owners •NOT A500•
U445 AMIGADOS TUTORIAL - Beginners guide for Workbench 2.0 - 3.0 Amigas
U439 BMENU v2.2 - Compile your own disks and use this disk menu system to load the programmes. •NOT A500•
U440 X-PASSWORD - Hard drive security password system. Limited release. Full version only from author. •A1200 ONLY•
U441 BACKDROP STRAMASH - Workbench backdrops.
U442 FOOTBALL ICONS - Icons displaying the shirts of all the World Cup finals teams. Plus the Scottish and English Premier divisions. •A1200 ONLY•
U443 AMIGA DOS GUIDE v1.0 - Provides useful help on what the DOS commands are and what they do. Plus many of the common Dos error codes explained in English, etc..
U444 GAME WARPER '20 - Hacks and cheats for 10 top games plus the Custom Poke Machine that will allow you to use Action Replay Pokes on your fave games without the need of that expensive cartridge •A1200 ONLY•
U437 AMOS EXTENSIONS - Seven great Amos/Amos Pro extensions adding more capabilities to both languages.
U342 SUPER LEAGUE v3.5 - Latest version of this football league database and statistics analyser. Bug fixed version.
U435 THE DESIGNER v1.42 - Demo version of this GUI designer for C and Pascal programmers •NOT A500•
U436 BLITZ SHAPE EDITOR v1.1 - For Blitz basic coders. Shareware demo version.
U449 ZXAM SPECTRUM EMULATOR AGA v1.3 - Optimised Speccy emulator to run games as fast as possible. Includes games. •A1200 ONLY•
U450 DISK MANAGER 4.0 - Database for your DOS disks. Automatically reads the files from the disks. •NOT A500•
U291 RELOKICK 1.41 - Revised version. Couple of added features. Downgrades Kickstart 2.0/3.0 to 1.3

## UTILITIES
U291 RELOKICK 1.4 - Downgrades Kickstart 2 & 3 to Kickstart 1.3 to aid in compatibility problems.
U301 A-REXX MANUAL - Extensive manual on the A-Rexx programming language.
U294 POOLS TOOLS - Football pools predictor
U323 FOOTY - Football league database. Presents various types of statistics, plus match predictions
U293 PARBENCH - Amiga networking software
U353 TERMINUS 2.0d - Modem software
U300 NCOMM 3.0 - Lastest version of this incredibly popular communications package
U383 SPECTRUM EMULATOR v1.7 - Run Spectrum games on your Amiga. Load in software via a sampler.
U103 MESSYSID II - Transfer files to and from Amiga DOS and PC MSDOS disks.
U369-370 (2 DISKS) SCALA BACKGROUNDS - Hi-res backdrops for use with Scala.
U342 SUPER LEAGUE 3.40 - Fully configurable Football league database. Loads of features.
U404 GURU - Tells you what those errors are
U402 AMIGA GUIDE TO COMMS - Everything you could ever want to know about Modem communications. Very well written •NOT A500•
U375 BBC EMULATOR - Run BBC software on this great emulator •NOT A500•
U382 PRINTER DRIVERS - One hundred and ten printer drivers for most printer makes and models
U318 BLITZ BLANKER - Screen blanker with loads of novelty blanker modules •NOT A500•
U407 VIDEO TRACKER - Create impressive demos with no programming knowledge.
U415 FORCASTER - Horsing racing predictor
U419 LECaG/LECaM - Assembly programming language - editor and compiler. All set up
U417 1200 HARD DRIVE SET UP DISK - Formatting and partitioning software for all A1200 Hard drive owners

## CLIP ART
U236 - Photo copiers, Office, Men at work.
U230 - Food.
U224 - Sign boards, Star Trek, Christmas
U223 - Sports, Transport, Work.
U221 - Anatomy, Buildings, Christmas, Holidays
U220 - Animals, People, Places
U218 - Cartoons, Construction, Religion, School, Weddings
U386-U388 (3 DISKS) WILDLIFE CLIP ART.
U100 - Teddy bears
U96 - Easter, Christmas, Jungle Animals, faces.
U251 - Babies, Furniture, Space, Skeletons
U233 - Christmas
U229 - Cars, Flowery decorations, Cupid, Hearts.
U227 - Palm trees, Party invites, Maps of Europe, Postage stamps
U226 - Wild west, Crowds of people, Frames, Signs
U225 - Fancy letters, Cars, Cute animals
U222 - Music, Silhouettes, Symbols, Teddy bears
U356-365 (10 DISKS) MILITARY CLIP ART
U385 - Anatomy
U389 - Anatomy.

### EPU STACKER v1.70
Compress your hard drive up to 50%, doubling the capacity. Added automatic installation, compression and removal feature so it's now easy peasy.
DISK REF: U329. New Version.
•NOT A500 COMPATIBLE•

## EDUCATIONAL
E75 THE DARK ROOM - Learn how photographs are developed
E59 STAR VIEW - Displays all the stars, planets, and constellations. With zoom facility.
E16 CHESS TUTOR - Four programs that take you through the rules to taking part in historic matches
E52 COLOUR THE ALPHABET 2 - Learning game for children. Includes Digitised speech. V.good
E41 FRACTIONS - Teaches and tests you on (+)ing, (-)ing, (x)ing, and (/)ing with fractions.
E49-E51 (3 DISKS) DESKTOP GUIDE TO MUSIC - Everything you ever wanted to know about electronic music. •NOT A500•
E44 THE MATHS ADVENTURE - Maths problems integrated into an adventure game
E74 EASY SPELL 2 - Spelling game. •NOT A500•
E46 LITTLE TRAVELLER - Useful information on the Worlds popular travel spots for holiday makers
E23 TOTAL CONCEPTS - ASTRONOMY - Lots of interesting facts and digitised stills.
E24 TOTAL CONCEPTS - DINOSAURS - All about prehistoric Earth.
E76 FRENCH WORD TESTER - Title name speaks for itself •NOT A500•
E12 UNITS - Speed, time, weight, length, angles, force, density, volume. Measurement conversions
E35 STEAM ENGINE - Cross section animation of a steam engine. See how they work, with labels.
E37 FOUR STROKE PETROL ENGINE - Cross section animation of a car petrol engine.
E43 GAS TURBINE ENGINES - Cross section animations of an old and modern turbine jet engines.
E54 STIRLING ENGINE - Cross section animations of the Stirling engine.
E56-57 (2 DISKS) AMERICAN FOOTBALL - Comprehensive illustrated rule book of this sport.
E68 KIDS DISK 2 - Maths Maze, Beat Sheets, Shape sorter Edutainment games
E55 COMMUNICATE - Teaches you Morse code, Braille, flags, sign language etc.. Good learning tool.
E58 DESERT STROM HYPERBOOK - Multi media presentation of the Iraq war. Day by day account.

## CLASSIC LITERATURE
Complete books on disk.
T44 Antony & Cleopatra, Julius Caesar, Midsummer Nights Dream.
T45 Robinson Crusoe.
T46 As You Like It, A Lovers Complaint, Cymbeline, Hamlet, Macbeth.
T48 The Winters Tale, Pericles, Prince Of Tyre, Two Gentleman Of Verona, The Rape Of Lucrece
T49 Romeo & Juliet, Tradegy Of Coriolanus, The Sonnets, The Passionate Pilgrim, The Pheonix & The Turtle
T50 Twelve Night, Loves's Labour's Lost, Venus and Adonis, Troilus & Cressida.
T51 Merry Wives of Windsor, Comedy of Errors, All's Well That Ends Well, Merchant of Venice
T52 Paradise Lost, Book 1 to 12.
T53-T54 (2 DISKS) THE ILIAD Books 1 to 24
T55 Much Ado About Nothing, Othello, Measure to Measure
T56 Henry the Sixth - Part 1 to 3
T57 THE ODYSSEY - Book 1 to 24
T58 A Tale of Two Cities.
T59 Taming of the Shrew, Titus Andronicus, Timon of Athens, The Tempest.
T61 The Adventures of Tom Sawyer.
T62 Through The Looking Glass, Alice In Wonderland.
T63 The Time Machine, The War of the Worlds.

## UTILITIES
U416 NO SAMPLER v2 - Several music module rippers
U379 LANDSCAPE - Garden landscape designer
U384 VIEWTEK 2.1 - Anery picture viewer •NOT A500•
U325 OCTAMED V2.0 - Music composer. The best.
U314 OCTAMED TUTOR - Tutorial for Octamed
U324 JC GRAPH - Graph/chart creator
U344 DELITRACKER - Music module player •NOT A500•
U331 AMIBASE PRO II - Easy to operate database
U304 TEXT ENGINE v4.1 - Word processor with in built spell check. Excellent
U311 EASY CALC PLUS - Spread sheet •NOT A500•
U327 DISKSALV 2 - Corrupt disk data recovery system. Work for both floppies and hard drives •NOT A500•
U296 GRINDER - Picture format convertor. Supports Amiga and many Non-Amiga formats (PC, Atari, MAC, etc.). You will need a hard drive and 2 megs of memory
U303 INVENTORY V2 - Stock controller for businesses
U377-U379 (3 DISKS) A64 EMULATOR V3.0 - Commodore 64 Emulator. Latest version
U345 REORG v3.11 - Disk optimiser •NOT A500•
U281 D-COPY 3.1 - Disk duplication software.
U273 ACCOUNT MASTER v2.1 - Personal accounts manager. Very professional
U158 NO ERRORS - Formats and hides hard errors on floppies and hard drives. Don't chuck those bad disks
U368 TRONICAD - Schematic CAD package
U354 LYNAPUNOVIA - Fractals, Mandelbrot generator.
U421 GOLF SCORE ANALYSER - Your own personal Golf score statistics database/analyser
U423 X BEAT PRO - Computer Drum kit
U424 SIRDS - Random Dot Stereogram generator
U425 WORD UTILITIES - Spelling checker, Anagram solver, etc.
U427 EPOCH MASTER v3.0 - Diary, calender, appointment scheduler, and simple accounts package. Shareware •NOT A500•

## A1200 ONLY

### DEMOS
D188-D189 (2 DISKS) BIG TIME SENSUALITY - Wow.
D185 FATAL MORGANA - Includes Beavis and Butthead
D184 FULL MOON - Lots of atmosphere
D172-D173 (2 DISKS) ORIGIN - Heavy duty demo.
D193 BEYOND BELIEF - Heavy duty demo.
D180 EMPTY HEAD - Produced by two top coding groups
D172-D173 (2 DISKS) ORIGIN - One to impress your non Amiga owning chums with.
D201-D202 (2 DISKS) QED 2 - Impressive follow up
D203 MINA OMISTAN - Mini music video on a disk.

### GAMES
G282 MEGABALL AGA - Superb arkanoid clone in 256 colours
G296-297 (2 DIDKS) MOTOROLA INVADERS - Shoot-em-up for AGA computers
G283-285 (3 DISKS) KLONDIKE DELUXE AGA - Fantastic card game. Each card shows a different 256 colour picture. Glamourous ladies
G319 CINDY CARDS - New set of Cindy Crawford cards for Klondike Deluxe owners
G326 KISS THE CANVAS - Boxing game with large animated sprites.
G365 WAYNE'S WORLD PONG - Pong game with digitised samples. Pretty neat

### SLIDESHOWS
S108-S109 (2 DISKS) FIT CHIX 1
S110-S111 (2 DISKS) FIT CHIX 2
S112-S113 (2 DISKS) FIT CHIX 3
S114 BODY SHOP III.
S115-S116 (2 DISKS) BODY SHOP IV.
S117-S118 (2 DISKS) BODY SHOP V.
S119 ERIKA ELENIAK
S122 BEACH BABES 1.
S123 BEACH BABES 2.
S124 BEACH BABES 3.
S125 BEACH BABES 4.
S125 BEACH BABES 5.

## GAMES
G337 BOB'S GARDEN / DIGGERS - Conversions of Mr Do and Dig Dug. Arcade classics.
G339 DEFENDER - Faithful coin-op conversion.
G273-274 (2 DISKS) STARBASE 13 - Sci Fi graphic adventure. Interface similar to Monkey Island.
G222 CHESS GAMES - GNU Chess •NOT A500•, and Chess 2.0 (for all Amiga's
G280 BLACK DAWN - 3D perspective dungeon game with an Alien Breed scenario.
G210-211 (2 DISKS) TALISMAN - Huge icon driven graphic adventure. •REQUIRES 2 MEGABYTES•
G241 IMPERIAL WALKER - Take control of an X-Wing fighter and stop the Imperial Walkers from reaching the Allied HQ. 3D Game.
G299 HIGH OCTANE - Overhead racing game for 1 or 2 players. The best graphics in a PD racing game.
G286-287 (2 DISKS) EXORCISM - Sinister graphic text adventure in a haunted house.
G257 DELUXE PACMAN - Great Pacman clone.
G265 BONDMINE #13 - Boulder Clone at it's best.
G268 SLAMBALL - Futuristic American football management game. Based on Speedball.
G269-270 (2 DISKS) 18th HOLE - Golf game.
G307 DARTS - Darts game.
G294 FLEUCH V2 - Thrust clone.
G300 V CHESS 2.0 - Featured packed Chess game. Everything you could imagine and more •NOT A500•
G304 DELUXE GALAGA - Fabulous shoot-em-up. Amazing graphics. •NOT A500•
G317 HYPERDRIVE - The fastest Amiga game ever. One or two player blast ship racing and reflex tester. Wow. •NOT A500•
G314 A DAY AT THE RACES - Horse racing management game.
G316 SOLAR LORDS - 2 to 4 player space strategy game. •NOT A500•
G310 GORF - The classic arcade game.
G321 WIPEOUT - One of the best looking PD shoot-em-ups around.
G322 AUTOMOBILES - The closest thing to Skidmarks doing the PD circuit.
G323 PARADROID 64 - Clone of the Classic Commodore 64 game •NOT A500•
G331 SUPER LEAGUE MANAGER II - Football management game
G325 ACT OF WAR V1.4 - Superb action strategy wargame like Laser Squad/Breach
G327 PJP FORMULA 1 MANAGER - Run your own racing team
G328 RAISE THE TITANIC - 3D Vector undersea adventure. V.good
G330 CAG v3.1 - Produce professional graphic text adventures without any programming knowledge.
G324 TASKFORCE - Strategy war game
G182 TREASURE ISLAND - For younger players
G35 JAR - Crystal Castles clone.
G221 BOW & ARROW - Archery game
G126 TOTAL WAR - Based on the strategy board game Risk
G26 THE HOLY GRAIL - Text adventure
G312-G313 (2 DISKS) MR MEN OLYMPICS - Decathlon game with the the Mr Men characters.
G255 AMOS CRICKET - Shareware Cricket game
G342 SCRABBLE - The great word board game.
G332 DRELBS - Clone of the C64 game.
G338 DEFENDER - The best clone yet
G340 OVERLANDER - Like Moon Buggy
G341 KUNGFU CHARLIES - Platform beat-em-up.

## MISCELLANEOUS
T36 ALIENS CONFIDENTIAL - Loads of 'true?' stories from around the globe on Aliens and UFO's.
E65-E66 (2 DISKS) TARRO MASTER - Tarro card fortune teller and tutorial.
E18 BIORHYTHMS - Reveals your monthly biorhythms chart
E17 CALORIE BASE - Count your calories. For dieter's.
T40-T42 (3 DISKS) GRAPEVINE # 19 - The most popular Amiga disk magazine. Very professional
E47-E48 (2 DISKS) SEE THE AURA - All about the human energy Aura. •NOT A500•
E60 CODE MUNGUS - Highway code tester. V.good
E69 ASTRO 22 - Astrology tool for horoscope prediction.
E79 THE MYSTERIES OF THE RUNES - Tutorial on the meanings of the ancient Rune stones •NOT A500•
T28 DREAMS FOR AN ANGEL - Reveal the secrets of your dreams.
T65-T66 PARANORMAL INVESTIGATIONS - Aliens, space, Sea monsters etc. •NOT A500•

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**Jason Holborn** has fun with SIRDs, adds 128Mb of RAM to his Amiga and still finds time to save a distant planet from oppression! How does he do it?

# PD Update



BUTTONMENU: *ButtonMenu (above)* enables you to create a window containing buttons which will run all your favourite utilities.
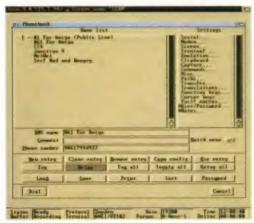
ERIK: Combing classic platform action with some great graphics and sound, *Erik (right)* is a sure-fire PD hit.



O riginally destined to be a full-scale commercial game **Erik** (F1 Licenceware, disk F1-048) by programmer David Parsons is now available as Licenceware because the software company that intended to release it went bust.

And the platform game's commercial origins certainly show. *Erik* boasts great graphics and the sort of gameplay that's sadly lacking in many commercial releases – it should be at the top of every PD buyer's shopping list.

Don't expect anything particularly innovative from *Erik*, but look forward to screen after screen of solid baddy-blasting, level-hopping platform action. You can also pick up cash to buy power-ups such as triple-way bullets and flamethrowers, in shops dotted throughout the game.

There are plenty of 'launch pad' utilities available for the Amiga – programs which allow you to run your most commonly-used applications



TERM 4.0: Don't be a sad unsociable so'n'so – talk to the outside world with a modem and a copy of *Term 4.0*.

by clicking on a gadget or selecting a pull-down menu item rather than having to click through endless directories to find the program's icon. Most of these utilities simply allow you to extend the Workbench Tools menu so that you can run a program by selecting it from there.

**ButtonMenu** (Cynostic, disk U0279), on the other hand, takes a slightly different approach. It enables you to create a window on your Workbench screen which contains a specified number of buttons, each of which can be assigned a program. You can, for example, assign a button to *DPaint*, another to *Pixel 3D Professional*, another to *PageSetter 2* and so on. When you click on a particular button, *ButtonMenu* then loads that program into memory.

**Included with the** program is a separate editor to create a file containing all the information on your buttons. Thanks to this utility, setting up your own custom button window is easy. *ButtonMenu* is a brilliantly-executed utility.

Although the quality of Amiga PD is exceptionally high it's still rare to find a PD program that matches the quality of its commercial counterparts.

Meet the exception – **Term 4.0** (Cynostic, disk U0278A). Although there are commercial communications programs available for the Amiga, none come close to the power and ease of use that Olaf Barthel, the author of *Term 4.0*, has managed to code into his exceptional Amiga communications package. Written specifically for Workbench 2.0 (or greater) Amigas, *Term 4.0* is without doubt the most comprehensive and powerful Comms package available for the Amiga.

Amongst its impressive list of features, *Term 4.0* offers fast VT-220 terminal emulation, support

for custom terminal emulation modules, file transfer through the use of commonly available XPR libraries (of which many are bundled with the program) and a user interface to die for. Put simply, this is one PD program that has everything but the kitchen sink. If you have a modem and a Workbench 2.0-based Amiga, then you simply must get your hands on a copy of *Term 4.0*.

PD authors have tried their best to produce *Monkey Island*-type adventure games with varying degrees of success. The latest attempt at a PD arcade adventure is **Relics Of Deldroneye** (F1 Licenceware), a £6.99 four-disk game which has been programmed completely using *AMOS Professional* by a chap called Lee Bamber.

Lee's game is very similar in style to *Simon The Sorcerer*. Just like Simon, your character is controlled by forming sentences by clicking on key words which run along the bottom of the screen. Whenever a sentence is formed, your animated character then puts it into action.

Both the gameplay and the quality of *Relics'* graphics are totally top notch, as are the very well thought out puzzles. At the start of the game you find yourself cooped up in a dingy prison cell with a magician and a rather grim looking rat. After talking to the magician, you're told that in order to escape the cell, you must find him some food. How you find food for the old man is left down to your powers of deduction and the steel toe caps on your boots (oops!... I've given away a clue!). The puzzles are pitched at just about the right difficulty level and *Relics Of Deldroneye* is this month's pick of the PD games.

Unless you've spent the last few years mining coal in darkest Siberia, you cannot have helped but notice just how popular SIRD images have

**Continued overleaf ➡**

SHOWFONT: Need to know what fonts are installed on your system? You need *ShowFont* mate!



VMM: Fancy 128Mb of RAM inside your Amiga for a measly £3? Well, it's possible with a copy of *VMM* and an MMU-equipped Amiga.



SIRD GENERATOR: Can you see what image is hiding in this SIRD? Nope, nor can I!

← become. You know, the collection of coloured dots which, if you stare at them for long enough, reveal a hidden picture – or so we're told, I still can't see anything more than dots. But if you want to create your own SIRD images, Kew-II have released *SIRD Generator* (U1156) for all Workbench 3.0-based Amigas, which can create images with up to 256 colours.

If your Amiga has an '030 or an '040 processor then the chances are your machine has a Memory Management Unit (MMU). That's all fine and dandy, but what's the point in having one?

One use is for running the Unix operating system, but having used Unix extensively I can assure you that watching paint dry is more fun. Another (or should that be the other) use is to run a Virtual Memory System, a program that allows you to set aside a section of your hard drive which your Amiga treats as RAM. As a result, it's possible to fool your machine into thinking it has hundreds of megabytes of memory available.

Up until now, the only Virtual Memory system available for the Amiga was *GigaMem* but now the PD libraries have something to offer in the form of *VMM* (Cynostic disk U0294). Similar in operation to *GigaMem*, *VMM* allows you to set aside up to 128Mb of hard disk space as virtual RAM. It works by paging data very quickly between your hard disk and a temporary buffer. You can set aside an entire hard disk partition (the safest and fastest method), a file (the most flexible method) or a pseudo partition (a combination of the two).

**Fonts are crafty** little blighters. It's fairly easy to keep track of what programs are installed on your hard disk, but fonts are a different matter altogether. Like rabbits in the Spring, they seem to increase at an impossible rate. Each time a new program is installed, more fonts can creep on to your boot partition without you even realising it. How do you keep track of them? Simple – you use *ShowFont* (Cynostic, disk U0291).

*ShowFont* handles standard bitmapped and CompuGraphic outline fonts and it even shows colour fonts in their default colours. It's only real fault is a slow screen update and unresponsive user interface – if you can put up with occasionally having to wait, *ShowFont* is well worth obtaining. **AF**



RELICS OF DELDRONEYE: Has *Simon The Sorcerer* finally met its match? The only way you're going to find out is to treat yourself to a copy of *Relics Of Deldroneye*, F1 Licenceware's brilliant new arcade adventure.

## WHERE TO GET THE DISKS IN THIS ISSUE

KEW-II, PO Box 672, South Croydon, Surrey CR2 9YS. Tel: 081-657 1617.

F1 LICENSEWARE, 31 Wellington Road, Exeter, Devon EX2 9DU (no phone).

CYNOSTIC PD, Office 01, Little Heath Industrial Estate, Old Church Road, Coventry. Tel: 0203 681687.

## TOP 10 GAMES AND UTILITIES

Every month we peruse the bestseller lists of a prominent PD company. This month, it's the turn of:

### KEW–II PD
### 081-657 1617

| | | |
|---|---|---|
| 1. | SuperDisk 2.1A | U1106 |
| 2. | MapMaker 2000 (WB 3.0 only) | D1060 |
| 3. | DiskSalv 2 | U1110 |
| 4. | Bomb Pac (AGA) | G1086 |
| 5. | Magic Workbench Extras 2.0 | U1113 |
| 6. | DMS 2.03 | U1101 |
| 7. | Magic Workbench 1.2 | U1072 |
| 8. | Reorg 3.11 | U1082 |
| 9. | AGA Spectrum Emulator | 01041 |
| 10. | Workbench 2/3 Utils 4 | U1114 |

# PD Demo Zone

In this month's exciting episode of Demo Zone, **Steve McGill** demystifies the world of 3D and movies and discovers three outstanding examples of Amiga animation.

There's an inkling of a hint of a suggestion of an implication that this month's Demo Zone has an ever so slight 3D theme to it.

There's one grab-your-retinas-out-of-your-eyeballs-and-massage-silkily-with-fluorescent calamine lotion, 256-colour ray-traced spacecraft demo. Another obscure surrealistic monochromatic inner-space travelogue with a couple of flaws worth mentioning. And last, but most definitely not least, I've been looking at an incredible 20-minute long video featuring the work of Craig Collins, the man responsible for this month's *AF* cover and one of the hottest new talents currently working in the Amiga scene.

**The first demo** to be dragged out of the non-material magnetic ether is aptly titled *Trip In A Vein* (Club12001). Generated by Jonathon McBrien of Digital Retina, you need at least five meg of memory to run it. A hard drive is desirable but not

CRAIG COLLINS: His video can't strictly be called PD, but we felt that his technical and artistic prowess deserved some space on these pages. Check it out.

essential. *Trip In A Vein* features a tiny compact spaceship travelling down an incredibly clean-looking vein, which may just have something to do with the choice of title.

Anyway, we've included 16 frames from this 71 frame extravaganza to give you more of an idea of what it looks like. In the section with the most action, the ship has to roll evasively to avoid some plasmatic detritus travelling toward it on a collision course.

There's no denying that it looks similar to some of the tunnel sequences from *Microcosm*. No

TRIP IN A VEIN runs for 71 frames. The 16 illustrated above contain the most action of the whole animation. A hostile piece of detritus (probably a white blood cell) followed by

mean feat considering the accolades heaped on that 3D graphic overdose. In the ReadMe file attached to the first of the seven disks, Jonathon states that he hopes to have another ray-traced animation ready by the end of September. If it's anywhere near as impressive as *Trip In A Vein*, it'll be well worth the wait. How about cobbling a video together Jonathon?

**Talking of videos,** everyone and anyone interested in 3D work should check out the Craig Collins video called *The Imagine Collection* from 17 Bit. It features several animations and animated miniature movies that have all been rendered with *Imagine*. There are several one-off look-at-me animations such as *Dolphins* and *Sunset And Blue Jets*. They only last for about three seconds, but due to a simplistically effective loop the running time is long enough for the casual viewer to take in the detail.

Both of these works were among the first animations Craig created. His latent talent was immediately obvious then. Now, that talent has flowered into slick, impressively entertaining professional productions.

The transfer to video tape is a real winner. For example, with *Mean CD Machines*, the original release was mute. The piece bursts to life with the addition of sound. Three cars line up on a grid. Each one represents a CD console – CD-i, Mega CD and CD$^{32}$. The engines roar into life with explosive ferocity and the race is on. No prizes for guessing which console wins.

**Another animated movie** on Craig's video worth note is *Aliens 4 – The Survivors*. Everyone in the office was impressed by this one. The basic plot is that the company revisits Archeron to scout for some aliens. Cue a tense walk through the complex. Various camera angles are employed that would probably cost a fortune if they were used in real life and the mini-movie eventually ends with a less than happy shot of several aliens suspended in life support vats.

Craig Collins' artistic and technical skills seem to improve with every animation and should inspire anyone who is interested in animation or 3D work with *Imagine*.

What's more, the really encouraging aspect to all this is that the movies were put together using consumer equipment – no single frame controllers or professional decks in sight. Oh, and something else that some coders should take note

**BREATHTAKER:** Smooth, flowing camera zooms, pans and tilts ensure an air of excitement in *Breathtaker*. Shame about the interruptions though.

of is that the credits are placed at the very end of the production. So you only have to pay attention to them if you want to.

And yes, they were worth taking notes on. Craig Collins' video is available through 17 Bit at a slightly pricey £12.99. Rest assured though, a royalty from every unit sold will wheedle its way into Craig's pocket.

Another ray-traced journey, *Breathtaker* (Cynostic), coded by Virtual Dreams isn't as pretty as *Trip In A Vein*. It lasts longer though and features some neat, verging on tight, cutting and camera tracking.

In one particular instance, the craft at the centre of the piece embarks on a flythrough toward the centre of a surreal landscape dominated by a large edifice resembling a navel. The camera zooms as the craft travels forward creating an almost genuine feeling of speed and acceleration. Unfortunately, *Breathtaker* suffers

from a common detraction associated with the Public Domain demo scene – an in-your-face, totally unsubtle pre-announcement of the forthcoming effects. In *Breathtaker's* case it's a motion-blurred Gouraud shaded mask. It bears no relation at all to the rest of the demo, so it looks a bit silly and completely out of place.

**Maybe this style** of presentation makes someone somewhere ooh and aah in wonder. Personally, I'd expect a ReadMe file with details of the effect or some hard information at the end of the demo. That way interested parties can actively seek out the info and take notes.

Craig Collins' video should be actively searched out by the coders of *Breathtaker*. They'll learn a lot from it in terms of pace, narrative and entertainment. The sooner they do, the better because any videos they release will be something to look forward to.

## TOP 10 DEMOS

The kind supplier of this month's top 10 demo chart is:

**VIRUS
0924 366982**

1. Big Time Sensuality AGA
2. Love AGA
3. Full Moon AGA
4. State Of The Art
5. Jesus On E's
6. Please Release Me
7. High Spot Funky Dancer
8. Pygmy Projects – Extensions
9. Kefren's Desert Dreams
10. Neural Assault

## WHERE TO GET THE DISKS IN THIS ISSUE

**CYNOSTIC,** Office 01, Little Heath Ind Estate, Old Church Road, Coventry.
Tel: 0203 681687

**17 BIT,** 1st Floor Office, 2/8 Market Street, Wakefield, West Yorkshire WF1 1DH.
Tel: 0924 366982

**EPIC MARKETING,** First Floor Offices, Victoria Centre, 138-139 Victoria Road, Swindon, Wiltshire SN1 3BU.
Tel: 0793 490988

a molecule of some kind means that the ship has to take evasive action. The motion is smooth, it features 256 colours and it's a credit to the author Jonathon McBrien.

# FROM THE MAKERS OF

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## THE SUPER CD32 CONTROL PAD

If your original CD32 control pad is feeling its age, or you just want an additional pad to play two-player games on equal terms, you need The Super CD32 Control Pad from Competition Pro. With turbo fire, auto fire and slow motion features, the pad is perfect for CD32 games (such as *Brutal Sports Football* and *Wembley International Soccer*).

| Description | CD32 Control Pad |
|---|---|
| *AF* price | £19.99 |
| Order code | AMFCPP |

## BLITZ BASIC 2

This powerful and flexible *BASIC* programming language from Acid Software has faster compiling and coding, new commands, and everything from C structures to an inline assembler. This package comes with a manual, a user guide, four issues of the *Blitz User Mag* and five disks full of *Blitz Basic* games extensions and examples.

**save £20**

| Description | Blitz Basic 2 |
|---|---|
| RRP | £69.95 |
| *AF* price | £49.95 |
| Order code | AMFBB2 |

## WAVELINK

Double the speed of your *Lightwave* rendering with *Wavelink*. Now anyone with two Video Toaster Systems can use them both for rendering. *Wavelink* includes a cable to connect two Toasters together so they can render at the same time. It also enables one Toaster to see the other so file sharing is easy. NOTE: *Wavelink* requires Workbench 2.0 and two Video Toasters, v2 or v3.
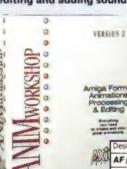
| Description | Wavelink |
|---|---|
| *AF* price | £99.99 |
| Order code | AFWAVE |

## ANIM WORKSHOP V2

With full AGA support *Anim Workshop v2* provides tools for creating, playing, processing, editing and adding sound to your animations. Create animations from files, separate them into individual pictures, delete frames and add pictures. NOTE: *Anim Workshop* requires Workbench 2.0. For image processing, *ADPro/MorphPlus v2* or *ImageFX 1.5* is required.

| Description | Anim Workshop |
|---|---|
| *AF* price | £99.99 |
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## AF BINDER

If your mags live in large piles on the floor, and you can never find the one you want, then keep your *AF* collection neat and tidy with these practical, yet stylish black and silver *AF* binders.

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|---|---|
| *AF* price | £9.99 |
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## MEGALOSOUND

Enter the exciting world of sound sampling with MicroDeal's brilliant *Megalosound* sampler. *Megalosound* enables you to grab your own samples, edit them to suit your requirements, and then mess them up again with *Megalosound*'s many fun effects.

**save £10**

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|---|---|
| RRP | £34.95 |
| *AF* price | £24.95 |
| Order code | AFMEGA |

## MIDI INTERFACE

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**save £5**

| Description | Midi Interface |
|---|---|
| RRP | £24.95 |
| *AF* price | £19.95 |
| Order code | AFMIDI |

## AMOS MANUAL

If you want to get the most out of *AMOS The Creator*, you need this complete manual, which includes an Extras disk with all the example programs we couldn't fit on the *AF42 AMOS* Coverdisk. This is an essential guide for programmers who want to make their *AMOS* work more creative!

| Description | AMOS Manual |
|---|---|
| *AF* price | £13.95 |
| Order code | AF249 |

# WorkBENCH

We've sent Nick Veitch away for two weeks to drink Guinness in Ireland, so in his absence Jason Holborn steps in to the Workbench hot spot to solve your problems. Write to Workbench, *Amiga Format*, 30 Monmouth St, Bath, Avon BA1 2BW.

Installing software on to a hard disk is a lot easier thanks to Commodore's Installer utility which has been adopted by most software developers.

## HARD DISK HASSLES

Please help me! I recently bought an unexpanded A1200 second hand. I took my external floppy drive, BJ10ex printer, and CBM1081 monitor off my old A500, and hooked them up to the A1200. Everything worked fine, until I bought a 170Mb hard drive, which the shop fitted for me.

Now, half my old programs don't work when transferred to hard disk. They all run fine from floppy, but refuse to load from hard disk. It's

driving me mad! I have tried reducing the max speed setting from *HDTool Box*, I've tried degraders, embedders, boot options, *IconX* scripts to assign paths, and I even tried making a pact with the devil, but John Major was too busy to see me... (just kiddin' – John's far too wimpy to be bad, he's just evil).

Recently, I got hold of a copy of *DOSTrace*, here's the resulting information gained.

The system requester says: Unable To Load Tool <filename>.
*DOSTrace* says: Loading segmented image <filename>..... Failed. And then shows that various directories were searched for <filename>, all of which Failed.

The programs I'm having trouble with include *Protext 4.3*, *Cinemorph Junior*, *Adorage*, *MaxiPlan 4* and *PageSteam 2.2*. Have I overlooked the obvious, or is this a common problem? If you could shed any light on this, I'd be very happy, my sanity would be saved, and you'd be my life-long hero.

*Steve Batt, Barnet, Herts*

Installing programs on to a hard disk is often a source of frustration for beginners particularly if

**Continued overleaf ➡**

## IF YOU HAVE A QUERY...

Jason Holborn

At *Amiga Format* we aim to answer as many questions as possible, and hopefully to sort out all your problems. Of course, there are always more questions than answers, so we prioritise queries according to the following factors:

● **Frequency.** If a lot of people seem to be having problems with their Supersonic KY3000 printers, then we will print one letter and the definitive answer, encompassing all the most frequently posed problems.
● **Difficulty.** If the problem is actually something which only someone with some insider technical knowledge would be able to solve, it is more likely to be answered in these pages than a problem which arises simply because you haven't read the necessary documentation.
● **Impact.** Quite simply, a question which involves you not being able to use your machine or some peripheral or software will be given priority over a difficulty which is little more than a slight inconvenience.

Unlike some magazines we won't just concentrate on the areas of expertise we are most familiar with, we will take on any problem (as long as there is an Amiga involved). As you will appreciate, we do get a lot of Workbench questions every month. If you want to get yours noticed, here are a few tips:

**DO**
● Be concise.
● Detail the actual problem as best as you can.
● Where applicable, describe the sequence of events that caused the problem.
● Give details of the equipment you are using (including which version of Workbench and which model of Amiga you have).
● Make sure your question is relevant and wouldn't be more easily solved by getting in touch with the dealer from whom you bought the goods.

**DON'T**
● Spend three pages telling us about your Aunt Ethel and only then explain your problem.
● Write in with questions like: 'I added a hard drive to my Amiga and it doesn't work. What can I do?' (Which machine? Which drive?)
● Send an SAE expecting a personal reply. The chances are extremely slim.

Please bear these points in mind and remember that we are trying our best to help you.

## SOUND ADVICE

I am both a budding DJ and an A1200 owner. I would like to use my Amiga to record in 16-bit CD quality stereo to my hard drive and remix or megamix what I have recorded. The questions I would like to ask are:

**1** If anybody brings out a 16-bit sampler for the A1200, could I sample to an IDE hard drive in stereo at a high enough rate to match DAT or CD? If so how long could I sample per megabyte?

**2** I know there are packages for the PC specially designed for remixing tracks on a hard drive. Do you know of anything similar in production for the A1200 or is it beyond its capabilities?

**3** Is it possible to buy the manual to accompany the *Music X* Coverdisk from AF58?

*Craig S. Blair, Glasgow*

**1** The only 16-bit sampler currently available for the A1200 is MicroDeal's Clarity 16 which costs around £150. Unfortunately, Clarity is far from perfect. Its main failing is that there are absolutely no software packages available that support it so, although you can grab some fairly reasonable samples with it, you can't replay Clarity samples in anything other than the Clarity sample editing software (which is lousy).

HiSoft (who now handle MicroDeal products) are rumoured to be working on a new 16-bit sampler which will be bundled with a specially written 16-bit version of Teijo Kinnunen's OctaMED Professional 6. Although I haven't yet
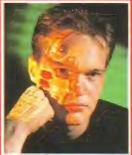
If you want the ultimate in Amiga samplers then you should get your hands on SunRize Industry's totally mouth-watering AD516 card.

seen this, it sounds like just the sort of thing you're after. Give HiSoft a call on 0525 718181.

**2** Hard disk recording systems like SoundCraft on the PC are very impressive but they also cost an arm and a leg. Similar systems are available for the Amiga including SunRize Industries' brilliant Studio 16/AD516 16-bit sampling car. Unfortunately, there's one big problem with this – you need an A4000 or an A3000 to use it because the sampling hardware is held on a slot-in card for these machines. Sorry.

**3** Yes, you can buy the manual for the Music-X v1.1 Coverdisk separately. It costs £14.99 and is available from Software Business (0223 576186). Send them a cheque for £14.99 along with a covering letter and they'll send you a manual by return of post. Write to Software Business at Cromwell Business Centre, New Road, St Ives, Cambridgeshire PE17 4BG.

← the application you're trying to install doesn't come with any form of installation program. Commodore have tried to rectify this problem by supplying developers with a standard Amiga *Install* program that does all the hard work automatically. Most recent programs use *Install*. The problem is, all the programs you mention don't (although Soft-Logic do include a hard disk install script with *PageStream 2.2*).

You've already got the PD utility *DOSTrace* – a program that I can't recommend enough to anyone who owns a hard disk-based Amiga. *DOSTrace* displays a list of every single DOS operation that an application makes while it's attempting to load. More often that not, programs fail to load because you've failed to copy across a file that the program requires (usually a library file). By the sound of the error messages you're getting, this is exactly what has happened. All you need to do to solve these problems is to transfer the file that the program is trying to find into the appropriate directory and try again.

## CRASHING MANSELL

When I load *Nigel Mansell's World Championship* from Gremlin on my A500+ it loads up for a while then a system request box appears with the message: Mansell Disk 1 Has A Read Error On Disk Block 126.

When I click on Cancel a big box appears with the message: Mansell: Error 26 Mansell Failed Return Code 10. When I click on re-try the original box appears again. I've tried using *Disk Doctor* and *Boot X* version 4.5, but with no luck. What shall I do? I have Workbench 2.

*Steven Gough, Southgate, Aberystwyth*

I'm afraid I've got some very bad news for you Steven – your game disk is no more. It is an ex-game disk. It is no longer of this world and the only way you're going to be able to play *Nigel Mansell's World Championship* is to buy a new copy.

## SIZE ISN'T EVERYTHING

I own an A1200 with external drive, a Citizen Swift printer and a new mouse. Here are my questions:
1) In a PC magazine, I saw an ad for a 3.5-inch one-inch high Maxtor IDE 340Mb hard drive for £225 which I think is cheap. Would this work on an Amiga, if so where can I get the leads and other things to link it?
2) I have a copy of the PD *Action Replay IV*

program. When trying to save a ripped picture it states Sorry No Bitplanes. What is a Bitplane?
3) I have lost my *Blitz Basic 2* manual. Where can I get another?

*Alan Russell, Glasgow*

1) It certainly is possible to use PC 3.5-inch IDE hard drives with an A1200 but, I don't recommend it. These drives draw more power than the more normal 2.5-inch drives and you therefore need a pokier power supply to handle the additional power drain. But because the A1200 isn't designed to be used with 3.5-inch drives, you're asking for trouble if you use one.

If you must use a 3.5-inch drive, buy an external Zappo Smart Stor Plus drive (available from Indi on 0543 419999).

## A500 UPGRADE WOES

I am the proud owner of an Amiga 500 (Kickstart v1.3 – 1Mb Chip memory, 512K Fast memory) and I have some questions:

**1** I want to buy GVP's A530 with 120Mb of space, is this a good choice and how much does it cost?

**2** Can I connect several Reference 8Mb RAM expansions to my Amiga at the same time? If not, why not?

**3** I want to get hold of an upgrade kit that contains Kickstart v2.04 or Kickstart v2.05 or even better Kickstart v3.1 and all the disks with it. Which upgrade should I buy and how much does it cost?

**4** Can I buy an Memory Management Unit and a Floating Point Unit?

*Dennis v Dijk, Gronigen, Holland*

**1** If you are that keen on hanging on to your A500 then the GVP A530 is without doubt the best hard drive system you can buy for the machine. Not only does it offer a very fast data transfer rate but it also boasts a 40 MHz 68030 accelerator with 32-bit RAM expansion capabilities which significantly improves the performance of your machine. For the latest prices, give GVP's UK distributor Silica Systems a call on 081-309 1111.

**2** The simple answer is no. If you were to connect several RAM expansions together,

*If you want to keep your A500 up to date with current developments and improvements then you should upgrade to Kickstart 3.1.*

the RAM chips would all be trying to configure to the same address range, causing more conflicts than an episode of EastEnders.

**3** If you're going to upgrade your machine's Operating System then the only realistic option is to go for Kickstart 3.1. The complete upgrade kit, which consists of a Kickstart 3.1 ROM, disks and manuals is available for around £80 from BlitterSoft. They can be contacted on 0908 220196.

**4** If you buy the GVP A530, it's 68030 processor already has its own built-in Memory Management Unit and a slot is also provided for the addition of either a 68881 or the faster 68882 maths co-processor.

2) Bitplanes are essentially screen memory – that is, an area of memory inside your Amiga that holds all the pixel data that you see on your monitor display. By the sound of the error message you're getting, *Action Replay* is unable to locate this memory. Unlike most computers, the Amiga doesn't always place its screen data in the same memory location so finding it isn't that easy.

3. The *Blitz Basic 2* manual isn't available separately but you can still buy the full *Blitz Basic 2* package from *AF* Mail Order on page 136.

## MOVIES, GAMES AND ER... THE CD32

I recently bought an A1200 and I am impressed by the machine's performance compared to my old A500. I'm planning to add a CD1200 to this when it comes out, but I heard that the CD1200 cannot be modified to accept an MPEG cartridge, and so I would not be able to take advantage of the next generation of FMV games.

I have seen adverts for CD32 to Amiga connection kits, which allow Amiga owners to take advantage of FMV when it comes. Will a connection kit allow me to autoboot CD32 games, or will I have to use a software utility? Also, could you advise me which of the connection kits on the market is the best value for money, and where I can get hold of it?

*RS Freedman, Harrow*

What you need is the CD Network kit from Weird Science (0533 340682) which costs just £29.95. It includes everything you need to connect your CD32 to the A1200 so that it can read files from the CD32's CD-ROM drive. However, CD Network does not allow your A1200 to boot from CD-ROM. The question is, why would you want to do this anyway? After all, the CD32 runs games and FMV movies

(when it's fitted with an FMV cartridge) better than the A1200 anyway.

## FUN WITH FONTS

Congratulations to whoever had the idea of putting the excellent *PageSetter 2* on the Coverdisk of *AF63*. I have found the program invaluable, but I do have a few questions regarding how to use it.

My main problem is to do with the lack of fonts supplied with the Coverdisk program and the fact that it doesn't seem to support standard Amiga bitmap or outline fonts. I had a look around and discovered a program called *MakeMetric* on the *PSUtil* disk which is supposed to convert standard Amiga fonts to ones that can be used with *PageSetter*, however the program doesn't seem to work.

I have tried nearly all the fonts I have with the mentioned program but I always get the following message: %Sts-F-Openfail, Open Failed On File. Can you help? Am I using the program wrongly or could you suggest a good Public Domain font conversion program (preferably from 17 Bit PD as I live in Wakefield)?

*Mark Slater, Wakefield, West Yorkshire*
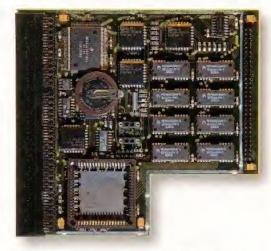
The reason *PageSetter 2* doesn't work with CompuGraphic outline fonts other than those bundled with the program is that it uses an older version of the AGFA CompuGraphic font format that requires an additional .atc file which newer fonts don't have. We've been trying to find a Public Domain utility that generates .atc files, but to no avail. If any reader knows of such a program then get in contact with us and we'll gladly stick it on a future Coverdisk.

## SPEED FIEND

I will be getting an accelerator card with an FPU to perform ray-tracing and fractal bits and pieces. Because I only wish to do this for fun, is it really worth me going for the power cards such as the GVP A1230-II 50Hz with 8Mb RAM or should I stick with the Blizzard A1220/4? Also does the Blizzard card have space for a clock?

*Rex Bigger, E-Mail*

If you're not that serious then the Blizzard A1220/4 will be more than suitable for the sort of work that you're hoping to use your A1200 for. Although it's only 68020-based, it's actually a very



Which A1200 accelerator should you buy? Is it worth spending more on a faster '030 card or is the Blizzard A1220/4 fast enough for most users?

rapid board as our round up of A1200 accelerators in *AF63* proved. Indeed, in our tests it wasn't actually that much slower than Power Computing's 28MHz '030-based Viper board – and the Viper costs £80 more.

Like the more expensive boards, the Blizzard card comes complete with a slot for the connection of a Floating Point Unit (FPU) which speeds up ray-tracing even further (providing you've got an FPU version of the software). As for the clock, you'll be pleased to learn that the A1220/4 has its own clock built in as standard.

## MUSIC-X MEMORY WOES

I have a copy of *Music-X* from the *AF58* Coverdisk but I can't run it on my A1200 without the message Insufficient Chip Memory constantly appearing. Is there any way I can get around this?

*Stuart Plumley, Bristol*

When *Music-X* loads, it attempts to grab as much Chip memory as possible for storing sequence data. Because the A1200 has 2Mb of Chip RAM, *Music-X* gets a bit confused and tries to use the memory twice, causing the program to lock up when you select any functions.

Don't worry though – you can get around this problem quite easily. First, reboot your Amiga using your Workbench disk and then make a copy

of your *Music-X* Coverdisk. When it has finished copying, stick the copy in your Amiga's internal drive, double click on the Music-X disk icon and then select the Music-X program icon. by clicking on it once with the left mouse button. Go to the Icons menu and select the Information option. Click on the New gadget (under the Tool Types window) and enter BUFFER=6000 and press Return. Click on the Save gadget and *Music-X* should now work fine.

## OUT OF MEMORY!

A few months back I bought *Wordworth 2* for my A500+, but I keep getting a message saying I don't have enough memory. I tried all the necessary things for more memory but still the same. I checked out the manual about how much memory it needed and it said at least 1.5Mb RAM, but my Amiga has only 1Mb RAM. Must I add more memory to my Amiga or is this not the problem? Please help!

*Brenda McAuliffe, Mallow, County Cork*

Many applications will load into a 1Mb Amiga even if they claim to require more memory but the lack of any additional memory severely cripples them. *Wordworth 2* is a good example – as you've already discovered, the program loads into your Amiga but try to do anything even remotely interesting with it and you'll soon get a visit from the dreaded Out Of Memory requester. As you suggest yourself, the only way to cure memory problems is to give your Amiga what it wants – more memory.

## THE GREAT PARTITION

I have a basic A1200 with a Conner 2.5-inch IDE hard drive. The hard drive is in two partitions called Work and Workbench. I had no trouble with the drive, apart from the lack of fixing screws and an HD prep disk, until disaster struck. I now have two problems at the same time.

The first of the problems is the worst. It happened when I was attempting to remove a file from the Work partition. I tried to delete it and it came up with the message: Work Has A Checksum Error On Disk Block 2714. I have tried everything I can think of, including the *AF57 Ami-Back Tools* Coverdisk but when it finds the error it comes up with the message The Bitmap Of Target Is Not Marked As Valid.

---
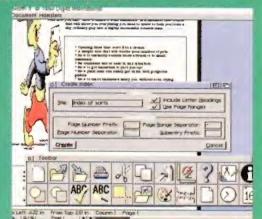
## WORDWORTH SPEECH IMPEDIMENT

My system is an A1200 fitted with a 170Mb IDE hard drive and 4Mb trapdoor expansion. This is my first Amiga and I'm very pleased with its capabilities compared to the PCs which I have used in the past.

I recently bought the excellent *Wordworth 3* word processing package and I'm very pleased with it except for the Speech feature which 'reads' part of or a full document. This requires the Commodore speech files to run and unfortunately, for WB 2.1 and 3.0 users, Digita aren't allowed to distribute the Commodore speech files. If I get hold of WB 1.3 software how can I, and where do I, include the Commodore speech files in my WB 3.0?

Please don't ask why I need to use the damn tool, hey it's just a poser item for the sad Mac and PC users to choke over. I am an absolute beginner and I only move files and things around by their icons so please give me crystal clear instructions (if the procedure is possible).

*Akbar Dayala, Frenchwood, Preston*



Even if you own a Workbench 2.1 or 3.0-based Amiga, it's still possible to get Digita's *Wordworth 3* talking to you. Just think - soon you'll be able to ignore your friends completely and have long and meaningful conversations with your Amiga instead!

Commodore no longer include the Amiga speech synthesiser with Workbench 2.1 and 3.0 Amigas but it is possible to install the necessary files from earlier Workbench releases to allow programs such as Wordworth to talk.

Quite why Commodore have decided to stop using the Amiga's speech synthesis capabilities is beyond me but it's a fairly simple process to get Workbench 3.0 talking to you. All you need are two files - translator.library and narrator.device which are normally held in the Libs and Devs drawers respectively. Copy these across onto your Workbench 3.0 disk (you may have to delete something to make room - remember to only use a back-up!) and Wordworth 3's speech function should work.

Although it is possible to use the speech synthesis files from a Workbench 1.3 floppy, I'd advise you to buy the Workbench 2.0 system disks because these have a much-improved version of the narrator device which produces more natural-sounding speech.
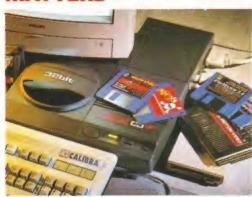
← My second problem is that the Work partition has somehow decided to get rid of its validator and I don't know how to get it back. Please help!

*Christie Ash, Norwich*

If *AmiBack Tools* has failed to cure the problem then the only thing you can do is to reformat your Work partition. This, unfortunately, is a problem that all hard drive owners have to face sooner or later. At least you haven't lost all your data – you should still be able to back up the data on your Work partition which can then be restored once the partition has been reformatted.

The reason why your Amiga is unable to find the Disk Validator is simply because Workbench 3.0 no longer needs it. Validating disks is now handled in ROM.

## CD³² MEMORY MATTERS

The SX-1 can cause compatibility with certain CD³² titles if you add SIMM memory chips to your machine.

I have a CD³² plus SX-1 and I have had 1Mb of 32-bit RAM fitted in the SX-1 for increased speed. The trouble is that I am unable to load some of my software on CD such as *Wing Commander* and *The Chaos Engine*. The screen picture takes on a funny colour or goes black.

Do you know of any way of disabling the Fast RAM to make it compatible with all my CDs? I have tried most degraders but they only seem to work on floppy disks. I hope you can help.
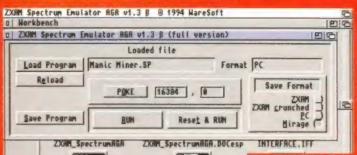
*C.N. Evans, Crymych, Dyfed*

The reason why you're having so many problems with your CD³² is that most CD³² games aren't designed to be run on a CD³² with more than the basic 2Mb of Chip RAM. Being a games console, games programmers simply assume that all CD³² owners have exactly the same memory configuration – the standard 2Mb of Chip RAM and absolutely no Fast RAM.
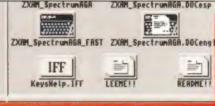
As a result, they don't have to worry about writing code that ensures that graphics and sound data is loaded into the right type of memory – graphics and sound samples must be loaded into Chip memory for the CD³²'s custom chips to access them. What is happening is that these files are loading themselves into Fast RAM which the custom chips cannot access.

Unfortunately, the solution to this problem is far from ideal. If you own a disk drive and you have a friend who owns an A1200, you could possibly make up a boot disk for your CD³² that simply ran your memory degrader and then transferred control to the CD disc's StartUp-Sequence. This is a fairly complex process, however, so you might want to get help from an experienced Amiga user. AF

# *In-depth explanation*
# EMULATORS



Enjoy all those classic Spectrum games without having to resort to the real thing – KEW II's AGA Spectrum emulator enables you to run them on your Amiga.



The only way to run a PC game like *Doom* is to buy a PC. Games such as *Doom* are written to take advantage of PC graphics cards capable of texture mapping in real time, something that Amiga PC emulators just aren't capable of achieving.

**1** An emulator is a program that essentially allows you to run the Operating System of another entirely incompatible computer on your Amiga, which means you can run programs designed for these computers on your Amiga. A PC emulator, for example allows you to run PC programs and a Spectrum emulator (!) means you can run programs for the aged Spectrum. To increase the level of compatibility, most emulators attempt to emulate the hardware of the machine which is being emulated so programs that 'hit the hardware' (address the electronics directly) will also run.

**2** There are a wide range of emulators available for the Amiga. To date, we've seen ones for the ZX81, Apple IIe, Commodore 64, Spectrum 48, Sinclair QL, IBM PC, Apple Macintosh and the BBC Micro. Although several of these require special hardware to run (mainly those designed to emulate the Apple Mac and IBM PC), most are software based. Better still, many emulators (including PC emulators such as *IBeM*) are now available through Public Domain libraries and only cost a couple of pounds.

**3** If you yearn for the days of Sinclair's 8-bit wonder, the ZX Spectrum, the best Spectrum emulator available is the *ZXAM* for the A1200 (it's AGA-only for some strange reason!) which is available from KEW-II *Public Domain* on 081-657 1617. It's on disk 1041.

Obviously the Amiga doesn't have an interface for connecting a tape player for loading Spectrum games and so the author also includes information on how to build a very simple lead which allows you to connect a tape player to the Amiga's joystick port. To get you started, the disk includes an enormous selection of classic Spectrum games including *KnightLore*, *Sabre Wulf*, *Jet Pac* and many more.

**4** Although it's perfectly possible to emulate a PC compatible, Amiga PC emulators are far from perfect. They are generally one of three sorts, each of which is capable of running software of a particular level. Purely software-based PC emulators such as *Transformer* and *PC-Task* are so very, very slow that they are only really useful for running extremely simple *DOS* applications and even then you're going to need a fairly fast Amiga to maintain a half decent emulation speed.

Further up the scale are cheap hardware-based PC emulators such as *ATonce* and the *KCS* card, both of which are available for the A500 only (although adaptors are available for both to connect them to big box Amigas such as the A2000 and A4000). Both of these emulators run considerably faster than purely software-based emulators although neither is quite fast enough to run PC applications such as *MicroSoft Windows* or most modern PC games.

Finally, we have the more advanced hardware-based PC emulators such as Vortex's *Golden Gate* boards which are based around more up to date Intel processors such as the 80386 and (better still) the 80486. Thanks to the additional muscle that these processors provide, it's quite possible to run well-behaved PC applications such as *AmiPro*, *Word For Windows* and so on. Unfortunately, however, these boards are only available for big box Amigas and, as far as we're aware, no similar hardware-based emulators are available for the A1200.

**5** Whether or not you should buy a PC emulator for your Amiga depends entirely upon what kind of software you wish to run it. Even on one of the more advanced 486 boards, don't expect to run PC games such as *Tie Fighter* and *Doom*. Although these emulators have the processing muscle to crunch numbers very rapidly, modern PC games require very fast 'local bus' graphics card which can redraw the screen incredibly rapidly and handle effects such as texture mapping (which is used extensively in *Doom*) through hardware.

Although the Amiga's own screen hardware is fast, the burden of emulating the PC's Operating System slows down redraws so much that games such as *Doom* would run so slowly that they would be totally unplayable. In short, the only way to play PC games is to buy a PC. Painful but true.

# Spectacular launch issue on sale
## Wednesday 26 October

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# .net

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**Cheaper than psychiatric bills!**

**Easier to understand than Wired!**

**Lighter than PC Plus!**

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If you want to get involved in the **Internet**
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Issue one on sale Wednesday 26 October

Essential reading for netsurfers – and those just about to dip their toes in the water

# Part 2 BETTER BY

**Marcus Dyson** takes a look at magazine layout, and how and why it follows and breaks the golden rules of design.

After last month's look at the basic rules of design, this month we are going to look at magazine design and see how those rules are applied, and when they are broken.

The magazine page layout shown here attempts to convey information attractively and accessibly. A good designer will read the copy and study the pictures to go on a page before laying it out. If it were not for the need to look at the subject matter and think about the type of people who will read the finished pages, design could be fully automated.

It is because every aspect of page design has to be considered, be it the font, the colours or the positioning and size of the type, that the job of designer is a very skilled one.

*Snowboard UK* is an enthusiast's mag so they don't need to be spoon-fed information. Rather than making the text as clear as possible, the designers can be more imaginative. But this spread is for beginners, aiming to help them improve their snowboarding technique. The information must be clear and legible but it must also live up to the rest of the mag's youthful style.

I designed this spread, so let's take a look at what I was trying to do – and if it worked.

This is the first in a series of articles starting with the very basic turn, leading through to more advanced carving and on to basic freestyle moves. If you can already ride its a chance to check your technique, if you're just starting out it's a few pointers to help you on your way. The difference between the really good guys, freestyle and racers, and the rest is the quality of their basic technique. Once the basics are there then the individual style can flow. If you start out with good basics your rate of improvement will be fast. Get it right now and how far you go is up to you. So before you learn to jib, learn to ride!

The first in the series looks at the basic turn. Important points to look for are the basic stance: Good weight distribution, a nice relaxed upright body position keeping the arms low in a natural feeling position for balance. Most important is that the upper body doesn't make too much excess movement, at all times try and keep relaxed and facing in the same direction as your front foot. (If you have a low angled freestyle stance - Flat/Straight across - then you'll stand facing your toe edge, as your angles increase the body will turn to face the front more.) So don't turn the upper body to face forwards unless your bindings face that way. Stay side on and let the board and the body move together.

With the Basic Turn the board is kept quite flat through most of the turn, this makes the board easier to slide around. The edge is used mainly in the traverse and finish of the turns to act as a brake and hold the new direction.

The second part of this issue looks at the basic technique of riding Fakie and then something to work for.

# Tekniqu

All writing by Neil McNab. Photos by Xxxx xxxxx Xxxx xxxx (Direction, Spelling and Grammar corrections by Editor)

THE BAS

**Neil McNab.**
Overall British Snowboard Champion
British Slalom Champion
Senior Sean Slalom Champion
British Super G Champion
Freestyle Halfpipe Finalist 5th place

**Becci Malthouse**
Overall British Snowboard Champion
British Slalom Champion
British Super Slalom Champion
British Freestyle Halfpipe Champion

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# DESIGN

e...

## C SLIDE TURN - SOFT BOOTS

**Rider Neil McNab**

1 Starting on the toe edge in a base traverse. The body is side on with the arms to the sides.

2 Slowly flatten the board by sinking down and moving your weight towards your front foot.

3 Keep the weight forwards and start to turn your hips and body down hill. The board will start to turn down the slope and become flat.

4 Keep turning the hips and start to stand up, pushing your legs straight out down hill. The board has changed to the heel edge. The arms are still held at the sides for balance.

5 Keep turning the body and push the back leg straight out until the body and body are facing across the slope.

nding the legs out and standing back up this will bring you back into balance over your board. As a final touch to finish the you push the back leg straight out down the hill, this skids the board and acts as a braking effect. This will also eliminate owing back which will result in loss of control. The body must continue turning until it is facing across the slope in the el. In the pictures you can see the upper body is leading the board around the turn. (If the upper body and hips aren't facing there's a high chance you won't be going there.)

6 Relax into the heel side traverse.

7 Start to turn down and move your weight forward to flatten the board.

g the weight forwards, look where you intend to go.
rt to stand up turning the hips and body across the slope. The board has changed to the toe edge

both legs, concentrate on the rear leg to stop the weight from falling onto the boards tail.

ar foot down the slope skidding the back of the board downwards in a breaking action

ee traverse

## THE TITLE

The title image is typographical, but it was actually created using a paint package. The type tool in the paint package was used to create the word Teknique, the spelling is purposefully wrong to give the feature an individual character while still clearly stating the subject matter. The letters were then picked up as brushes and had their baselines moved up and down to loosen the design.

Then the word was copied on to a spare page for later attention. On the first page, a scan of some snow was pasted into the letters, then darkened and made more bluey so that it would show clearly on the white background. On the spare page, the word was then blurred to give a shadow-type effect. Then the snow-filled word was picked up as a brush and pasted on to the shadow to give an effect that really makes it stand off the page.

You will see the same shadow effect used many times on the pages in this issue of *Amiga Format* – it is in fact used on the headline of this very article.

## THE STEP-BY-STEP PHOTO

The main image is by far the most striking element on the page. Sweeping from top right to bottom left it completely dominates the layout. And that's just how it should be, since the whole spread is basically an annotation of this image.

Digital trickery has been used to superimpose a series of shots of the same snowboard rider throughout a manoeuvre on to one image. Rather than just composite them all into one big rectangular picture a dynamic curve has been created to emphasise the speed and smooth-flowing motion of the snowboarder.

A blue border has been added to define this shape more clearly. If the image were just laid on the white page surface, the white snow of the photo backgrounds would not be clearly enough defined from the page to make this design work.

## THE TEXT

Using large, clearly visible, bright red numbers on each separate stage of the photo-progression ties them clearly to the appropriate bit of the text. It also breaks the text into nice-sized chunks that are easy to approach.

The flow of the text, achieved by using separate format styles for each paragraph, echoes the flow of the rider, and again ties the text to what it is seeking to explain. The text itself is in a simple plain sans serif font for a clean, modern look.

The paragraph headed Note breaks our rules about line length. But it is only five lines long, so reading it does not present a difficulty, and the extra line length helps to distinguish it from one of the more normal 'steps' in the instructions.

## OVERALL

These pages from *Snowboard UK* are an attempt to creatively use that most tricky of design tools – white space. To give the spread a clean, textbook-like appearance much of the surface was left blank. This was also intended to arrest the reader's attention, since this is the first in a series of articles for beginners.

If the fading background on the left border had worked as intended, the whole spread would have had a lighter, much cleaner feel. As it is it appears unbalanced because of the heavy blue background on the introductory text.

# PAINT TUTORIAL

**Jason Holborn shows you how to build an aquarium and fill it with fish – without ever leaving your Amiga.**

Computer pets: they don't smell, won't bite and cost nothing to feed. They're ideal for the hard-up Amiga user – and the struggling artist who wants to bring a bit of the real world on to the computer screen.

This month's tutorial uses plenty of the subtlety of *Personal Paint*, but the subject is still within the bounds of most keen users. It's a bit more sophisticated than last issue's example – but hey, this is a learning process, right? Stick with it and you'll be painting solo in no time.

Creating the image is divided into five basic stages, each giving an insight into how to get the most out of your *Personal Paint* package. The mode is Low Res, 256 colour, with a screen size of 320x256; OK? Then let's go fishing....

### THE TANK

Clear the screen to black, and using a mid-grey colour and the single pixel brush, draw one rectangle inside another. The gap between the two should be around 3cm, and the larger rectangle should take up almost all the screen.

Select dark blue as your background colour, and black as the foreground colour. Call up the Area Settings requester (right click on the paint can tool), make sure Gradient is the selected fill type, the gradient setting icon shows up and down arrows inside a circle, and the range icon shows just a start and end block (not a series of blocks). Click on Proceed.

Fill the inside rectangle, and you should see colour pour in, starting with blue at the bottom and black at the top. Using the brush cutting tool, copy a rectangle from the middle of the interior to the bottom. Press the Y key to flip the brush vertically, and place this at the top half of the inside rectangle. It will now look as if blue starts at both the top and bottom of the inside of the tank, merging to black in the middle. A subtle and very watery effect.



**For the metallic effect on the outside edge of the tank, use a gradient range from white to dark grey. Check the Area Settings requester and ensure your fill settings match the icons shown here.**

To create a realistic brushed metal look to the outside edges of the tank, use Gradient fill again, but with a couple of changes to the method outlined above: click on the gradient setting icon until you see a circle with four arrows inside it, and select white as your foreground colour, and
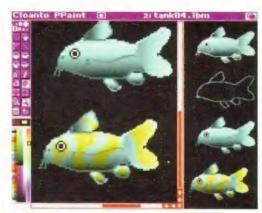
black as your background colour. When you now fill the gap between the two rectangles, *Personal Paint* magically highlights the edges for you, giving a solid, 3D textured effect.

Remember to save the picture of your tank for safety. It's time to play Baron Frankenstein and create some life...

### THE FISH



**Six stages in the drawing of our fish – from basic outline to multi-gradient filled finale. The body, fins and tail all need different Gradient Settings, which are explained in this article. The coloured tint adds that extra-special finishing touch.**



**A close up showing how the fish is drawn and finally coloured using the freehand Tint effect.**



**Once you've drawn one fish, you can use it as the basis for several other kinds. By calling up the stretch feature from the Brush pull-down menu, you can contort your original drawing any way you like. Note the small fish hanging about at bottom left.**

Press the J key to move to the alternate screen. Ensure it's the same mode and size as your main screen (check and edit it by pressing I for the screen format editor).

You have to create the fishy shape yourself using *Personal Paint*'s Freehand draw mode, a single pixel brush and mid turquoise as the drawing colour. Draw the body first – imagine a bow laying on its side for the top, and duplicate this for the underside. You could use the Arc tool if you like – this has the useful feature of being editable until you confirm the curvature with a right-click of the mouse button. The fins and tail are similarly drawn freehand. If you're unsure, just copy my illustration. But don't fret – this is your tank and if you want fish the shape of Quavers, that's up to you!

**Draw a curved** line behind the head for the gill, and a wavy lateral line running along the side of the body. Using a medium round brush and white as the drawing colour, paint in an eye. Use a smaller round brush and black to create the eye's pupil. Remember, you can use the Curve tool for the gill to make life easier.

Once the lines are all drawn, with no gaps, we can think about filling in the fish. Using a neat trick of the program, we can add shadow and contour automatically. Select mid turquoise as the background colour, and the darkest turquoise as foreground. Call up the Area Settings menu (an old friend by now...) and with Gradient selected, select the circle enclosing an up and down arrow as the fill type.

Use this combination to fill the fish's body and any fins drawn on the lower side. Call up the Settings menu, and make one alteration – select the fill type which shows a circle enclosing arrows pointing left and right. Now fill the dorsal, or top fin. One last tweak – keep the fill type as it is, but switch the foreground and background colours and fill in the tail.

This might seem painful just for one fish, but get it right and the creature takes on a solid, realistic appearance.

**Once you are** happy with it, cut out and paste the fish down twice on screen, and save it as a brush because you never know when you might need the little sucker again. We're going to create a new breed of fish now, using *Personal Paint*'s Filter option. Call this up by right-clicking on the Filter icon, and select Tint as the option. Select yellow as your drawing colour, and the Freehand Filter drawing mode.

Note that this is different from ordinary Freehand mode. If you click repeatedly on the Filter tool, you cycle through the two available modes. The Freehand Filter mode shows an uneven filled shape, and the alternate mode shows a rectangle. We want it to be the uneven shape.

By drawing uneven shapes over the fish, *Personal Paint* tints the existing colours, allowing you to create some weird and wonderful effects – reds and blues are very effective for bright marine

life, and yet underneath you still retain your fish shape and contour.

We can also save time by using the original fish drawing and moulding it into other shapes – in our example I've squeezed it horizontally to create a rounder body. To do this, cut out the fish as a brush, and from the Brush/Resize menu, select Stretch (or simply press key Z). You can now interactively control how your image is being distorted by clicking and dragging the mouse.

You are bound to lose some definition as pixels are rearranged, so be prepared to touch-up the finished object if you are unhappy with it.

In the same way as we coloured the large fish, you can Tint your new creations to your heart's content – these are our tiddlers and they're there to make the background interesting. You should now have a varied assortment of small, large and multicoloured fish on a screen. These are the basis for stocking the aquarium, so save the whole screen now. Switch to the main drawing screen, and if the tank isn't on there, load it in.



A textured gravel effect is achieved by using Pattern fill and different shades of brown.



Time to start stocking the tank, with small fish swimming together in the shallows. Note the bubbles rising to the surface – they are simple light blue circles.



Using the filled Freehand drawing tool, you can create a series of plants and then place them randomly in your aquarium.



A series of rocks are dotted around the bottom, hiding the joins where the plants meet the sand.

## THE DECORATIONS

Looks a little bare, doesn't it? Time to be creative again. The first thing to do is draw the gravel on the bottom. To get a good, coarse texture we can turn to another *Personal Paint* function – Patterns. Call up the Area Settings requester, and instead of having Gradient showing, click on the box until Pattern shows. Select dark brown as the background colour, and light brown as the foreground colour, then click on the Dither setting to activate a 50% pattern.

Using the regular filled Freehand tool, draw out a softly undulating shape along the bottom of the tank. Note that when you come to the sides and base of the tank, press Shift as you draw to constrain your drawing to a straight line. Once you let go of the mouse button, the shape fills with the rough browny pattern. You can add a shadow effect to areas of the gravel by using the Tint and the filled Freehand filter, with dark brown as the foreground colour.

**The plant life** is created using the normal Freehand filled drawing mode, with various closely-related shades of green. I actually created a couple of plants on the alternate screen, then copied and pasted them on to the tank screen. The benefit of this two-tier method is that you can rectify your errors much more easily than if the plants were drawn directly on to the main screen; and once cut out as a brush, the plants can be outlined in black so they stand out. Outlining is simply a matter of selecting a very dark foreground colour, then pressing key O. Another plus factor is that you can draw a couple of single, stringy leaves, then cut them out and flip them horizontally to build up a larger plant.

On the alternate screen, away from the plants, start work on the rocks. The large ones are Freehand filled shapes, with smaller shapes of differing colours drawn randomly on top to add highlights. To create non-similar duplicates of this one object, cut it out as a brush and flip it horizontally (keys X and Y) and vertically (key Y), paste it down for safe keeping, then make your brush smaller by pressing the H key, and flip it too to create a variety of styles.

You should now have two or three plants and a series of pebbles on your alternate screen. Cut out one plant at a time, outline it in a dark colour, and switch to the main drawing screen before placing the greenery in the tank to suit yourself. Do this as many times as you like – but don't clutter the tank up with too many plants. Do the same with the stones, placing them around the base of the plants to hide the join, and spread them about the floor of the aquarium.

## MIX AND MATCH

Save your tank again, giving it a different name from the original saved image so you can customise it in the future. Swap to the alternative screen and load in the image you saved with your fish on it. Cut out your creatures, outline them, and place them on the main tank screen. Keep the small fish in shoals for company, and don't overstock the tank! Notice how tiny light blue circles of 'air' have been added.

TIP: From our illustration, you may notice that I've overpainted some plants on some of the small fish. This gives a good feeling of 3D depth. Don't be afraid to part-cover your work with foreground objects – it all adds to the realism.

## LIGHT TOUCH

The final touch adds more realism – shafts of sunlight piercing the tank. The graduated blue-black gradient fill we used for the water work to our advantage now, giving a shimmering, translucent quality to the light.

Switch to the spare screen and clear it. Using the filled Polygon tool, draw diagonal stripes in bright yellow, around 3cm wide, with 3cm gaps between each stripe. Don't fill right to the edges of the screen with them – just fill an area roughly the same size as the inside of the tank. If you like, draw an unfilled rectangle in a different colour to act as a template, the same size as the tank, then erase it once the striped bars are finished.

Cut out the stripes, and go to the main screen. Select Tint from the image processing tool and paint down your brush in the right position, to give the impression of light rays striking through the water. It takes a while for *Personal Paint* to work out what to do, but it's worth it.



Here's a schematic showing how a banded yellow brush can be overpainted on the main drawing in Tint mode – to simulate rays of light dancing in the water.



And here's your finished aquarium. Add your name to the screen for a personalised touch.

# OCTAMED

**Ed Wiles shows you how to build your *OctaMED* tune using the sample on this month's *AF* Coverdisk.**

AMIGA FORMAT
DISK 62A

OctaMED v5

The classic eight channel Tracker clone. This complete version is more powerful than ever before! Make your Amiga sing!

OctaMED v5
By Teijo Kinnunen

Requires Workbench 2 or better

If you missed our fantastic *AF62 OctaMED v5* Coverdisk, turn to page 133 and order a back issue today!

L ast month we looked at basic song construction using *OctaMED v5*, and created a simple song in the process.

This month we'll add to the tune we created, and examine an easy way of organising and loading the instruments.

## THE SAMPLE LIST

**1** Load the song we created last month (you did save it, didn't you?). Load *OctaMED*, then select Project menu ->Open. Insert the disk containing last month's song into any drive, click Volumes in the file requester and click on the name of your disk. Now double-click on your saved song. Play the song through when it's loaded.

**2** Select Display Menu -> Sample List Editor. The Sample List is a list of all the instruments you have in your collection. Samples are the most popular type of instrument that *OctaMED* uses – they are sounds from real life, often created by feeding the sound into the Amiga from a sound source such as a tape recorder. All the instruments we'll ever use are samples.

Notice that the Sample List Editor is split into two lists – a list of your sample directories, and a list of the samples contained in those directories. The instruments currently shown aren't in our collection, so first of all we'll remove all the directories from the list. Find the Remove Dir button (which you will find below the Directories List), and repeatedly click on it until all the directories disappear.

**3** We have one sample on this month's Coverdisk. Let's add it to the Sample List. Click on Add Dir (beside RemoveDir), then insert your *Pixel 3D Professional* Coverdisk into the Amiga's internal disk drive. Notice that no files are shown – this is in fact a directory requester. Click on the directory labelled *OctaMED*.

Click on OK to add the directory to the sample list. Note that the instruments themselves are not loaded, only their names and in which disk and directory they're stored. Examine the Instruments List; all the files are instruments, except FunkyFifth.MOD and MadeEarlier.MOD. So click on

FunkyFifth.MOD and click Remove (below the list) to delete it from the list. Once this is done, remove MadeEarlier.MOD using the same technique.

**4** Now let's save the list. Replace the *OctaMED* program disk in any drive, then click Save List (far right) and click OK in the requester.

**5** Time to see what use this list has. Let's replace instrument 02 in our song with a different snare drum sample. Select instrument 02 (Shift-<right>, remember from last month?) and play it using the keyboard. Now click on Snare_Drum.u20 in the Instruments List, and click Load Inst (at the bottom – insert the Coverdisk if asked). Play this new snare drum sample.

**6** Now to load the other samples needed for the next part of the song. Close the Sample List Editor (use the Close gadget or Exit button), then click on the small button immediately to the right of 02 (upper screen, top row). This Instrument LoadWindow is a simpler version of the Sample List Editor, designed for instrument loading, surprisingly.

Select instrument 06 using Shift-<right> (it should be empty), then click on the AF65A directory in the list. Now load Hi-Hat Open1 by clicking on it. Select instrument 07, then load Guitar Solo. Load Chorus (major) into instrument 08, Chorus (minor) into 09, and Chorus (sus 4) into 0A. Close the window when you've loaded and played each instrument.

**7** We're now going to add another part to the song. There will be a different drum beat followed by a guitar solo. Add a new block by selecting Block menu -> New -> Append. Up until now we've used blocks 64 lines long, but we'll make this new block 32 lines. Move to it using Shift-<down>, then select Block menu -> Set Properties. Click inside the Length box, delete the 64 then type 32 and press Return.

Close the window when you've finished, then use the <down> key to check that the block is indeed 32 lines long (the block should also be empty).

**8** We are almost ready to enter the new drum beat, but first we'll look at another feature. *OctaMED*'s Default Pitch function allows you to set a standard note for each instrument. For example, last month we always entered instrument 01 (Bass Drum) with note C-2 (the Q key), so this could be called the standard note for this instrument. You can then enter the instrument using its standard note – or Default Pitch – by pressing the F key. So we'll set Default Pitches for all the percussion instruments: 01, 02, 03 and 06.

Click on Inst Params (upper screen, middle of second row). Select instrument 01 using Shift-<left>, then in the Instrument Parameters window find the Pitch Box showing — to the right of Default Pitch (bottom left). Hold down the left mouse button on it and press the Q key, then release the mouse button. Default Pitch C-2 is now set for this instrument.



**3** Simply point the *OctaMED 5* Sample List Editor at the directory which holds your samples and you'll be able to access them in an instant.



**6** Once you've told *OctaMED* where your samples can be found, it automatically looks in that directory whenever you load a song.

By default, all *OctaMED* blocks are 64 notes long but the Block Properties requester allows you to adjust this in either direction.



If your samples aren't quite in tune then the Instrument Parameters requester provides a host of tools for fine tuning samples.

**9** Select instrument 02, then set this instrument's default pitch to C-3 (using the I key on the Pitch Box). Set instrument 03's pitch to D-3 (using the O key), and instrument 06's to E-3 (using P). Close the window.

**10** At last we can enter the new drum beat. Make sure the cursor is on line 000 of track 0, then turn on Edit Mode (Edit Check Box, upper screen) and select instrument 01. Press the F key once. The bass drum instrument is entered at its default pitch C-2. Now press <down> once, select instrument 03, and press the F key three times. After this, enter the following instruments at their Default Pitch (using F), pressing the <down> key where indicated: <down> 02 <down> 03 <down> 01 <down> 02 <down> 06.

**11** Repeat the whole of step 10, this time starting from line 016 of track 0. The last note should be entered on line 030. Play the block through when you've finished.

**12** Well, to save you the drudgery of entering the rest of the song, we're going to cheat here in true here's one we made earlier style. The rest of the song is actually on this month's Coverdisk, so let's load it in. Select Project menu ->Open, and click Continue in the requester. Insert this month's disk in any drive, then click Volumes and AF65A, click OctaMED and double-click MadeEarlier.MOD. Play the song when it has loaded.

**13** Yes, the guitar solo is tacky (in fact it's blatantly contrived to fit next month's tutorial), and the bass line's ripped off from the Muppet Babies, and the song's tempo – playing speed – is painfully slow. So let's speed up the song.

Find the Primary Tempo slider (upper screen, the longer of the two sliders in the fourth row). Now click Play Song, and very gradually drag the

slider to the right until you find a better speed. I reckon 043 is a decent tempo. You'll find that the slider often increases in steps of 2. To select the intermediate values, click inside the slider's box but not directly on the black knob. When you're happy, stop the song.

**14** Finally we'll save our modified song. Last month we saved the song together with its instruments. Now that we've created a sample list, we can save the song without its instruments. Insert your disk containing last month's song in any drive, then click on Volumes and on the name of your disk. Now delete the MadeEarlier.MOD in the text box then type Song1.AF65 and press Return. Switch off Save Instruments and click on the Save button (bottom left).

## ALSO IN THE SAMPLE LIST EDITOR
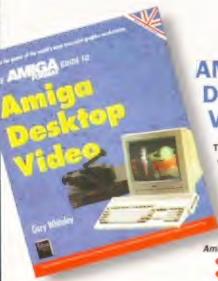
Select an instrument or directory by clicking on its name in the list. The six numeric boxes and Pitch Box show the selected instrument's default settings, or parameters. These parameters are assigned to the instrument when it's loaded, and affect various properties of the instrument.

The properties can be adjusted in the Instrument Parameters window; you may recognise the Default Pitch setting from steps 8 and 9. The Save All Insts button saves all the instruments in the song. This is handy for extracting all the samples from other people's songs for use in your own.

The Add button adds the current instrument to the selected directory. Save Ins is like Add except it also saves the instrument to disk. Del Ins is like Remove except it also deletes the instrument from disk – be careful! There's also a small menu attached to the window: hold down the right mouse button and you can load a new sample list or display some statistics about the current list.



That's the first track complete. Just three tracks to go and you'll be strutting out funky stuff in no time!



*OctaMED* happily loads and saves modules in a variety of different file formats including three of its own. Standard SoundTracker modules are also supported.

# BLITZ BASIC

If you want to buy the full *Blitz Basic 2* package at a special *Amiga Format* discount price of £49.95, turn to our Readers' Offers on page 135.

The power of the Amiga's video chip and the versatility of *Blitz Basic* are a fantastic programming combination. **Roy Ferguson** puts the team through its paces.



*Deluxe Paint* was used to create the control panel. The nice metallic effect was obtained by mixing up some colours with the Smooth and Blend function.

**O**ne of the features which distinguishes the Amiga from other computers and makes it the perfect platform for writing your own versions of arcade games, is the considerable power of its custom graphics chips.

There has never been such a low-priced computer as the Amiga with such an amazingly flexible programming video chip, and with *Blitz Basic* you can control every aspect of the video chip's many functions. This month we'll look at how we can use the Amiga's custom hardware to provide a smoothly scrolling backdrop when we're writing *Blitz Basic* games. Even better, we'll take advantage of the unique dual playfield option of the Amiga and also use the graphics co-processor (copper) to provide hundreds of different colours on the screen.

**First of all** we need to discard the idea of using the Blitz Screen command to create our display. For the kind of images we need to produce, we'll have to delve a bit deeper into *Blitz* and start dealing with raw bitmaps. A bitmap is an area of memory, nothing more. But the memory must be in the first 2Mb (or even the first 1Mb) in the Amiga, which is called Chip RAM. This is because, in order for it to be displayed on screen, the bitmap must be directly readable by the Amiga's custom chips.

We use the Bitmap command to set aside the necessary memory, and in order to specify the size we need to supply the height, width and the number of bitplanes (which is a measure of the

number of colours), like this:

```
BITMAP #bitmap-number,width,height,
depth
```

You can easily work out the depth from the following table:

| Depth | Max number of colours |
|-------|----------------------|
| 1 | 2 |
| 2 | 4 |
| 3 | 8 |
| 4 | 16 |
| 5 | 32 |

In our example we will use two bitmaps, each with a maximum of eight colours (and therefore a depth of three). The second bitmap is rather larger that the first – in fact, it's three screens long. This is because it is used to form a scrolling background. Assuming it is actually made up from

three different screens, the trick is to make the first screen and the third screen exactly the same. Then, if the display moves too far to the right that it would go off the edge, it is flipped back round.

The overall effect is a smooth, fast horizontal scroll. The first bitmap is a normal PAL screen of 320 pixels across by 256 lines down. It's a control panel where the score and associated details are displayed. Like the landscape, it was quickly drawn in *Deluxe Paint* and saved as a normal IFF picture.

**Blitz enables us** to load these IFFs directly into the bitmaps, which saves a great deal of hassle. When you are drawing your own backdrops, make sure they are the correct size (320 by 256 for the control panel and 960 by 256 for the landscape) and use only eight different colours. A program such as *Art Department Professional* is extremely useful for cropping the images and reducing the colours or providing a dithering scheme to give the effect of more colours – unfortunately it's very expensive, but keep a look out for various Public Domain variations which can do a similar job. In fact check out our PD image processing recommendations in the feature on page 117.

Looking at the background, you might think the colours are a bit simple. Well, you'd be right – there's only one colour for the sky, for example. But during the game the sky becomes a beautiful graduated blue – more details on this later.



The background landscape is three screens long, and the last screen is exactly the same as the first. Although the sky looks a boring blue, it changes to a graduated effect in the finished program.

We load in the IFF images with the Loadbitmap command, which takes as parameters the bitmap number, the filename and an optional palette number. The palette is important, because we'll need to make a few alterations to get both displays to be shown in their own colour.

Dual playfields are wonderful. Imagine being able to layer two completely separate screens one on top of the other. This is exactly what happens, and in this case the control panel actually floats across the background screen. There is no need to constantly redraw anything, because the bitmaps are never altered – it's the Amiga's video circuitry itself which is maintaining the effect.

**We can scroll** the background left and right, draw enemy ships and explosions all over it, and still the control floats on top. Luverly. We control this effect using the Slice command. Slice is how *Blitz* allows screens to be defined at the very lowest level, and it takes some experimenting with.

The arguments it takes are as follows:
SLICE #slice number, Y, width, height, flags, bitplanes, sprites, colours, width1, width2

Where Y is the starting location of the display on the screen. Stick to 44: Width is the width of the Slice display (such as 320); Height is the height of the Slice display (256 for example); Flags is a complicated variable providing control of several special features of the video chips; Bitplanes is the total number of bitplanes used in the display; Sprites is the number of sprites which may be required; Colours is the number of colours which are required; Width1 is the width of the foreground bitmap and Width2 is the width of the background bitmap.

In our example program, the entries are as you would expect. The magic number to use in Flags is $fffa, which enables a low resolution dual-playfield display.

Now we need to sort out the colours. This isn't as easy as normal, because each of the two IFF images we loaded in has its own palette. Both expect to be able to use colour pens number 0 to 7, which isn't really on. Of course, if both pictures did have the same choice of colours we would be OK – but this is rather limiting.

The way that the Dual Playfield effect works means that the colours for the second display are



With the dual playfield display switched on, the game is really starting to take shape. Notice how by using the copper to adjust the colours, we get plenty more than the maximum of 16 we started with.

stored in the next bank of colour pens. This is what we do in that colour loop – create a third palette, the first eight are from the control panel and the second eight from the landscape, but shifted up one.

When we use palette three, the colours for both of the playfields are magically correct. Hurrah! But now we use the ColSplit command to add some extra colours to the display. ColSplit redefines the colour of any given colour pen used in the display, but only from the supplied Y co-ordinate and downwards.

For example, in the top half of the screen colour pen 1 could be red, but after a single ColSplit command pen 1 could become green. The result is a picture which has different colours in the top and bottom halves. This function is incredible powerful, because it allows almost as

many colours as you could possibly need. Even better, because it works by programming the special dedicated graphics processor (the copper) it doesn't slow down the Amiga in the slightest.

**This time, I've** graduated the colour of the sky through various shades of the blue and green, and then the mountains through shades of red. Depending on the size of your display, you'll need to change the loop values for the best effect.

When all this has been done we can use Palette 2 – the one made by combining the palettes from the two pictures – and the display is complete. Now we can use the ShowF (show the foreground) and ShowB (show the background) commands to display our images and move them around, but more details on this and getting some objects moving next month. ⏃

## LISTING

```
;
; Blitz Zone;

; Load in the control panel

BitMap 0,320,256,3
LoadBitMap 0,"blitz2:panel.iff",0

; Load in the background

BitMap 1,960,256,3
LoadBitMap 1,"blitz2:landscape.iff",1

; Wait for file loading to stop

VWait 300

; Switch on BLITZ mode!
```

```
BLITZ

; Set up custom dual-playfield display

Slice 0,44,320,256,$fffa,6,8,16,320,960

; Sort out colours...

For i=0 To 7
    Use Palette 0
    PalRGB 2,i,Red(i),Green(i),Blue(i)
    Use Palette 1
    PalRGB 2,i+8,Red(i),Green(i),Blue(i)
Next i

; Making graduating colours

For i=1 To 200
    ColSplit 10,0,i/16,i/15,28+i
Next i

For i=1 To 50
```

```
    ColSplit 9,i/5,0,0,i+175
Next

Use Palette 2

; Display both bitmaps

ShowF 0,0,0
ShowB 1,0,0

; Scroll backdrop

For t=1 To 2
    For x=0 To 640 Step 1
        VWait
        ShowB 1,x,0
    Next
Next

MouseWait
```

# SEXPLOITATION

The Starship Enterprise under attack. Just one of the *Imagine* images you can access from the Internet.

**Are the porn merchants taking advantage of the Internet? Richard Baguley reports.**

Over the past few months, I've touched on many aspects of Comms, but there is one area which we haven't looked at: sex. This is a pretty hot topic at the moment, with ELSPA (the European Leisure Software Publishers' Association) producing a White Paper on how they intend to deal with all aspects of the problem of computer pornography, including games regulation.

**For Comms enthusiasts,** the most interesting section in the White Paper is on Bulletin Boards. ELSPA believe that there is a link between pirated software and pornography, and initially became interested after discovering pornographic images on several pirate BBS that they raided. ELSPA have now decided to report and investigate any BBS which contains pornographic material.

Although their primary interest is in pirated software, ELSPA have decided to put their efforts into combatting computer pornography because they see it as an issue that should concern software publishers. "This sort of thing will seriously affect

the image of lawful software publishers, we want to make sure that it's not distributed," said Roger Bennett, chairman of ELSPA.

It's amazing just how freely available pornography is, and I'm not just talking about your typical Page Three-type stuff. For instance, one Usenet newsgroup carried stories on rape, incest, underage sex and various other rather unpleasant things, all in the space of two days. Other newsgroups carry a variety of obscene images, including bestiality. These echoes are among the busiest on Usenet, and there are absolutely no restrictions on accessing them.

The legal situation is that, under the Obscene Publications Act, it is an offence to publish an "obscene article", which means anything that is judged likely to "deprave and corrupt". An addition to the 1984 Telecommunications Act also makes it an offence to transmit anything over the public telephone network which is obscene. This law was originally intended to cover obscene phone calls, but it can also be applied to transmitting obscene images, text files or whatever by modem over a public telephone line.

At the root of the pornography debate is the question of freedom of speech. The Internet and Bulletin Boards are, by and large, completely unrestricted, meaning that it is very easy for anybody to post whatever information they want, and some people choose to use it to promote and detail their own sexual preferences.

The question is whether freedom of speech should include the right to post stories about how good it is to have sex with small boys? Should we restrict free speech to stop this sort of thing being distributed, or should it remain as it is: a free for all?

**Oh, and one** final thing. Unlike other magazines, we haven't printed any of the images that I discovered when I was investigating this article. I have always found it rather ironic that some magazines will print lots of pictures of computer pornography and then go on about how terrible it all is. And before anyone writes in asking for copies of these images, I've also deleted them all from my hard disk.

ELSPA can be contacted on 0386 833810.

## MORE MPEGS, PLEASE!

Last month, we talked about movies on the Internet via the technology of MPEG data compression. Since then, I've discovered a new source of MPEG movies: The MPEG movie archive. This is located at the WWW page of HTTP://www.eeb.ele.tue.nl/mpeg/index.html.

This site carries a wide variety of MPEG movies, including some excellent space movies, a selection of animations, digitised video of supermodels cavorting on the sidewalk and others. It also has a lot of technical information on the MPEG standard, and links to several other pages with MPEG software. There is also a wide range of technical information on MPEG and future versions of this versatile standard.

Fancy getting hold of a few MPEG movies? Why not connect to the MPEG archive?

## IMAGINE THERE'S NO FTP SITE...

It's easy if you try. Those of you with Internet access may want to try pointing your FTP program in the direction of artemis.earth.monash.edu.au, in the directory /pub/Graphics/Imagine for a wide selection of *Imagine* objects both big and small. There is also a profusion of objects in *Lightwave* and *Real 3D* formats as well, plus a selection of images produced with all of these programs, such as the *Star Trek* image on this page. For those of you without Internet access, I'll be looking around for *Imagine* objects on Bulletin Boards in the next issue.

With the release of *Lightwave 3.5* standalone, many Amiga users have now found that they have the ability to produce high-quality animations with a commercial value... they can be sold!

Most people would be more than happy to accept money for animations they have created, but how many of them can put a price on their work? Time is money, and with this in mind you should sit down and consider what is really involved in doing commercial animation work.
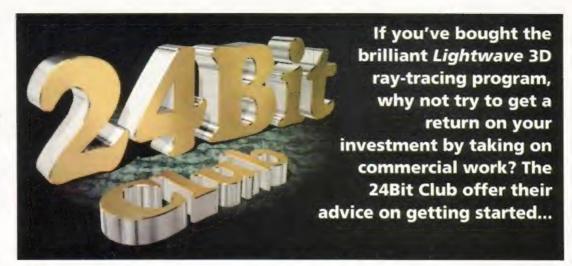
The following suggestions are based on advice given to members of the 24Bit Club over the years, many of whom are now running profitable businesses.

For starters: Creating your animation is only part of the difficulty. There are unscrupulous people out there who will take you for everything that you've got. You may find that someone promises you £300 for a 10 second animation, which sounds amazing to an aspiring animator. Then you discover that the client reneges on payment, saying the cash will be there, when you've finished another animation.

**This scenario could** be spun out for a few months, until you realise that you're owed £1,000, the client has discovered a hot new talent ripe for exploitation, and you have nothing to show for your efforts. So how can you protect your interests?

First off, you must discipline yourself into planning your animation project. For the initial design, generate pencil sketches or lo-res wireframe previews for your client's approval. At this stage, you should make clear your terms of payment before any design work is carried out. You should ask for an initial fee of about 20 per cent of the project cost, which is non-refundable. This cost can be deducted from the final bill if everything runs smoothly. We've found that asking for cash up-front removes time wasters allowing you to concentrate on profitable projects.

Don't forget to copyright your work by sending your samples (scenes, objects), in a recorded delivery package to yourself.

If you've bought the brilliant *Lightwave* 3D ray-tracing program, why not try to get a return on your investment by taking on commercial work? The 24Bit Club offer their advice on getting started...

# CASHING IN ON LIGHTWAVE

You can also use *Lightwave*'s data overlay function to put your animation name and date over the sample images – you'd be surprised how many people attempt to use your sample work as their own design. This effectively sets a date in which the project was first mooted to the client.

The next phase is design approval. This is where the client has paid their deposit, and has a time set, by you, to finalise the designs. You should emphasise that if the client requests changes after approval, then these are paid for by the client at your specified project rate. Once this has been agreed, a further 20 per cent payment is required before proceeding on to the final stage – the rendering.

This is the area where a lot of people can fall down – if you don't work out how long the total project is going to take to render, you can quite easily blow your deadline, your credibility and leave yourself open to the wrath of the client, which could involve legal action.

**Contact the 24Bit Club on 041-946 2191**

To work out how long the rendering takes, render the start, middle and end frames, and multiply the number of frames by the frame that took the longest time. This should give you a safety margin, because most of the frames at the beginning take less time to render.

Once completed, the client pays the final 60 per cent balance. It's important to remember that until trust has been established with the client, all cash must be paid up front. After all, once the master tape has left your hands, payment can be withheld quite easily and your only resort would be expensive court action, which can be more trouble than it's worth. If you are going to get involved with commercial animation, it's a good idea to contact a solicitor for further advice.

**Another area where** animators can fall short is the storage space they have available. This is important when you consider that the average size of a single 24-bit image being rendered is around 1Mb. We find the SyQuest 270Mb storage units to be an ideal and cheap way of keeping masters of work.

You also need to have sufficient RAM and speed to be able to complete deadlines. An '020-based machine is not up to serious work, and the bare minimum speed required is a 25MHz '040 machine. If you can afford a Warp card, give it a serious look because the time difference it can make to rendering is unbelievable.

It's also advisable to get a second machine equipped to the same specifications as your main unit. This not only cuts your rendering time in half (both machines can render different parts of the scene) but it also gives you the security of knowing that if one machine goes down and can't be repaired quickly, you can still continue to do your rendering – a vital consideration for commercial work. Of course, this also means buying duplicate versions of the software.



The waters of commercial animation are infested by sharks, so take the 24Bit Club's advice.

# MAILBAG

Another month and another huge sackload of assorted mail has landed on **Steve Jarratt's** desk. Send your letters to: Letters To The Editor, *Amiga Format*, 30 Monmouth Street, Bath, Avon BA1 2BW.

## PCS OF HATE

It is with a lot of frustration that I turn to you to sort out a problem. I am currently studying for an HND in Business and Finance, and the set-up at college is all PCs with *Microsoft Works* installed on every machine (with *Windows* to a lesser extent).

Because I have *Wordworth 3* installed on my machine (an A1200 with a 64Mb Connor hard drive and a Power PC1202-8 with 2Mb Fast RAM and 33Mhz Co-pro), working from home, with the help of *CrossDOS* and *Wordworth's Works* filter, is a doddle.

However, the course requires that 'professional' documents are to be submitted at all times – such as reports, information packs and brochures. Therefore some of these documents require illustrations.

If I am to work properly from home I need to be able to convert PC CGM clip art to the Amiga's IFF format and vice-versa. Is there any commercial or PD software that can achieve this? The software has to be for the Amiga only, (just in case you knew of suitable PC utility), because the college won't allow unauthorised software on their systems.

**Wayne Hardy, Cumbria**

*To be honest, you're going to have to buy an expensive image processing program if you want to convert your PC graphics files to Amiga IFF. Although it pains me to say it, your best bet is to get your hands on a copy of the Shareware PC program* Paint Shop Pro, *convert the images to IFF on the PCs at your college, take them home on a PC format disk and then read them into your Amiga using CrossDOS. It's not the most ideal solution but it's a solution nonetheless.*

## AIN'T IT THE TRUTH

*This Month In View* – here we go again with more deranged rantings about the Amiga as if it were a sacred cow. I now have some facts that some people will find hard to accept.
1. Commodore has no God-given right to survive – no-one in the world will buy a company that has an excellent product, but no chance of selling it. Whoever buys Commodore will have to market the product from the start, and that's expensive.

## CONFUSING DECISION

I own an A600 and I am interested in upgrading to a CD machine. First I was going to buy a CD32 and the Microbotics expansion module with floppy disk drive and keyboard. It has plenty of ways to expand and it has FMV compatibility.

Then the CD1200 came out. This to me is a non-starter because it ties up the trapdoor expansion slot. Then the Zappo CD drive came. In my opinion this is better than the CD1200 because it uses the PCMCIA slot and it looks sexier.

So please help me and point me in the right direction. Should I sell my A600 buy a CD32 and the expansion module, or by an A1200 and either the CD1200 (which I think is crap) or the Zappo CD drive. Please help or I may buy an ST!

**William Rasie, Peterhead**

*Given that the CD1200 won't be out for a couple of months, it looks like the Zappo is your best bet. But bear in mind that even with the Zappo drive your A600 won't play CD32 games, due the lack of AGA.*

Jason Holborn took a look at the Zappo CD-ROM drive in AF62. If you missed it, back issues are available on page 133.

*Your other option is to upgrade to an A1200 first, and then pick up a CD-ROM drive when the Amiga CD market takes off.*

2. Interactive TV, CD-ROM, Toaster etc. Brilliant products and ideas but they will not save the Amiga. People must separate Commodore from the fantastic feats that the Amiga can perform. Commodore, in whatever form it now exists must make money, if not, bye-bye Amiga.
3. Don't ever underestimate the PC/Mac market, they react 10 times quicker to any new trend, including price drops and new products. Show me the inclusive package for the Internet, including subscription and software for the Amiga.

Macs are not too expensive, £1,300 for a Mac LC475 with a 15-inch monitor, keyboard and 12Mb hard drive! (If you don't believe me phone Jigsaw of Nottingham). PCs may not be able to hack it at the moment, but if you give it a market, someone will come up with a software or hardware solution fast.

Yes I know it's easy to be negative, but it's also easy to be realistic. I have owned an Amiga for seven years in various guises and I feel it gives the best home computer solution for many people, but it has to now be marketed and developed well to ensure its continued existence.

**Chris Firth, Isle of Wight**

*Don't forget that to many people, the Amiga IS a sacred cow: if the Amiga dies it will be like losing a dear friend.*
*We all know what a mountain*

*Commodore: The Next Generation has to climb. We know that the Amiga is threatened on all sides by the PC and Mac. We all know just how bloody great the Amiga is. And if belief in its future will in any way help,* Amiga Format's *only real crime is to be optimistic.*

## T-SHIRT AND MUG

I am thinking of buying an Amiga 1200 and have a few questions I would like answered.
1) When will the new AAA RISC chip set be released and how much will it cost?
2) Can you make T-shirt transfers on the Canon BJC 600 and do you need any special hardware or software?
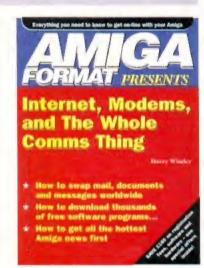3) Could you tell me the address of MUG (*MED* Users Group) because I like making my own songs on *MED*?
4) How do I get the songs I've made in every PD library around?
5) Has *AF* ever published a book on modems and if so, what is it called?
6) How do you print your own disk labels with pictures on a BJC 600 – I might start up my own PD company?
7) Why waste *AF*'s cash and set up *Spong*! Will this mean *AF* prices are going to rise to pay for this free Bulletin Board?

**Paul Tyson, Reading**

*1) Triple A has now been cancelled in favour of RISC, although an AAA RISC machine won't appear until late '95 at the earliest. Sadly.*

Everything you need to know to get on-line with your Amiga

# AMIGA FORMAT PRESENTS

## Internet, Modems, and The Whole Comms Thing

Davey Winder

★ How to swap mail, documents and messages worldwide
★ How to download thousands of free software programs...
★ How to get all the hottest Amiga news first

Turn to page 134 to order *Internet, Modems And The Whole Comms Thing.*

*2) The immediate answer is 'no'. Ed Builby at Care Electronics (0923 894064) can explain to you in great detail why it's tricky, so perhaps you should have a chat with him.*
*3) The* MED *User Group is contactable via Richard Bannister on 0793 825219.*
*4) You could always try compiling a disk of your work and sending it out to PD companies!*
*5) AF hasn't done a book on modems, but there's a new Future Book out now called* Internet, Modems And The Whole Comms Thing *by 'Wavy' Davy Winder. It's 350 pages long and costs £19.95. The book is available by mail order from*

**Continued overleaf ➡**

## THE BITS ON THE SIDE...

In a few weeks time I will be purchasing an A1200. I also have a Commodore 1526 printer connected to a C64. I would like to know if the 1526 printer works with the A1200. If it does, what is the procedure? Also, what does AGA mean?
**Stephen Yendle, Trowbridge**

*You might be able to get it to work using the MPS driver in Workbench, which you set up through Preferences. If not, maybe it's time to invest in a new (better) printer. If you don't have any luck, write to Nick Veitch at Workbench – and be a bit more specific next time!*

*AGA stands for Advanced Graphics Architecture and is the 32-bit chip set in the A1200, A4000 and CD32 which enables them to display 256 colours (and HAM-8) from a 24-bit palette.*

Could you please tell me where I can get a copy of *Captain Planet And The Planeteers* which came in an A500+ bundle? My disk got corrupted and I lost my game. Is there anyone out their with a copy?
**D Allison, 3 Pennine View, Kirkheaton, Huddersfield, West Yorkshire HD5 0NQ**

*Can anyone out there help?*

Can you tell me the address for Digital Illusions the manufacturers of *Pinball Fantasies*? The problem is I would like *Pinball Dreams* but it only comes with *Pinball Fantasies* and that is no good to me because I already have *Pinball Fantasies*.
**Altaira Webb, Cornwall**

*Digital Illusions are on 01046 470 80239.*

I am considering purchasing a null modem cable for my A1200. I have a few questions about it.
1) I am planning to connect my

A1200 to my mate's A500 for *Knights Of The Sky*. Will his A500 slow down my A1200 while playing the game head-to-head?
2) Please can you tell me all games that are compatible with the cable?
**Philip Sutch, Manchester**

*1) Yes, obviously the game has to run at the slower processor speed, otherwise it would be completely out of synch, and you would end up travelling through time or something.*
*2) Well, the null modem games listed in AF's Top 16 Hook-Up Games (as reported in the multi-player games feature in AF40) are as follows: Vroom (UbiSoft), Lotus 2 (Gremlin Graphics), RoboSport (Ocean/Maxis), Falcon (Digital Integration), Stunt Car Racer (Microprose), Flight Of The Intruder (Mirrorsoft), MiG 29 Super Fulcrum (Domark), Populous (EA), Populous 2 (EA), Powermonger (EA), Global Effect (Millenium/EA) and Stormball (Millennium). Me, I like Stunt Car Racer – classic head-to-head action.*

I am writing to you to ask if you will pass on to your readers the fact that I am selling a cheat disk that covers the following formats: Amiga, C64, Super Nintendo, NES, Mega Drive, Master System, Game Boy and Game Gear.

It has a large number of Action Replay pokes for them all, at least 20 complete solutions and guides, some type-in listing for the C64 and more than 20,000 words of cheats for games on all these formats. I am selling it on a self-booting disk for the sum of £5, which I feel is well worth it considering it has taken me about two years to complete it.
**Simon Finnigan, 9 Yarcombe Close, Halewood Village, Liverpool L26 7AE**

*OK – sounds fair to me.*

A new Amiga combining an A1200 with a built-in CD32-compatible CD-ROM drive. Can this be the shape of things to come?

◄ *our Somerton office (call 0225 822511) and, of course, through all good computer bookshops.*
*6) Any DTP or printing package will work as long as you can produce disk label-sized artwork. You might have problems using label paper (the stuff with a peel-off back) though, because it's thicker than normal paper and is shiny.*

*You might have to experiment a bit – or settle for printing on normal paper and then just glueing it to your disks (or maybe not).*
*7) Don't be so cynical. We set up Spong! as a service to our readers. We're currently in the process of making this a proper Bulletin Board, and it should be up and running very soon.*

### CUSTOM BUILDING

Having read the article in *AF62* about the future of Commodore, I must say that I think the A1800 is a step in the wrong direction.

Surely it would be a much better idea to build in a dedicated CD-connection port, put CD file-system support in Kickstart and then let people have the choice of buying any suitable CD-ROM drive and true Amiga CD-ROM titles, rather than CD32 titles which rely on custom architecture.
*Jonathan Putsman, Cleveland*

*Well, you can use any CD-ROM drive with an A1200 if you have a SCSI interface fitted to the machine (many accelerator cards offer SCSI options). Although you won't get the benefits of full CD32 compatibility (the CD32 has a special 'chunky to planar' chip which isn't inside the A1200), most CD32 titles would still run on such a set-up.*

*Very few CD32 titles are written to use the CD32s Akiko planar chip – Microcosm is the only one we have seen. Failing that, why not just buy yourself a normal A1200 and then fit a Zappo CD-ROM drive?*

### LANGUAGE BARRIER

Being of the masochistic persuasion, I have decided to devote myself to the learning of a new programming language. I would therefore be pleased if you would perhaps give me some advice on a few points.
1) Which language is the most commonly used? This may be a rather vague question, but I would eventually like to move into programming on a more serious level, and would probably cross to other platforms as a consequence. I always understood *C* would be the very bunny for me, but a dealer pointed out that it appears to have become incredibly unhip. Did

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## CONGRATULATIONS TO THE FOLLOWING COMPETITION WINNERS...

**POT THE SHOT**
Genna McCabe, Greenfield, Clwyd wins a pool table.

**I'M A MOTOR MOGUL**
The following lucky people each win a copy of *Detroit*:
Mark Harris, Yapton, West Sussex.
Matthew Gilks, Hampton, Middlesex.
Julian Cabell, Thatcham, Berks.
Robert Hart, Roehampton, London.
Steven Grainger, Harrogate, N Yorks.

**ZOOL'S COOL**
The winner of a TV, CD32 plus a copy of *Zool 2* is:
Irene Horsfall, Woking, Surrey.

The runners up (who each receive a *Zool 2* T-shirt) are:
N Grayson, Inverkeithing, Fife.
Mark Blackmore, Plymouth, Devon.
Carl Ward, Reading, Berks.
Richard Lee, Stanley, Co Durham.
Jonathan Bygrave, North Walsham, Norfolk.

**STRICTLY SENSIBLE**
Tapes of the *Cannon Fodder* theme go to:
James Heneghan, Billericay, Essex.
DP Taylor, Llanelli, Dyfed.
Ian Bullock, Coombe Dingle, Bristol.
Kevin Dixon, Stockton-on-Tees, Cleveland.
M Burnell, Westbury-on-Trym, Bristol.
Alex Roberts, Saxmundham, Suffolk.
Ashley Walker, Huddersfield, West Yorks.
John Clarke, Londonderry, N Ireland.
Calum Grimmond, Carnoustie, Scotland.
Steve Ashworth, Kirkham, Lancashire.

**MICROCOSM: WHAT A BLAST**
The following 20 readers get a *Microcosm* CD and T-shirt:
Phillipe Dumont, Nonceveux, Belgium.
A Nevis, London SW1.
Darren Gray, Newton Aycliffe, Co Durham.

Are you one of the 20 lucky readers who have won *Microcosm* CDs and T-shirts?

Russell Smith, Sheffield
Ian Harrison, Feltham, Middlesex.
Mandy Foster, Southsea, Hants.
Matthew Parke, Southwold, Suffolk.
Stephen Croft, Gayton, Wirral.
Iain Rockcliffe, Fife, Scotland.
F McCrory, Bedford, Beds.
LJ Harmer, London.
Wilf Walker, Dudley, West Midlands.
Paul Moseley, Rugeley, Staffs.
W Sanker, Darcy Lever, Bolton.
Russell Saxton, Highgreen, Sheffield.
Francis Beechey, Shenfield, Essex.
Andrew Wright, Chelmsford, Essex.

A Curtis, Chudleigh, Newton Abbot.
Pete Cunningham, Penyffordd, Chester.
Douglas Mouncey, Frosterley, Co Durham.

**CD-ROM GIVEAWAY**
Five winners get a Zappo CD-ROM drive and 10 games and five runners-up get 10 games.
Winners:
Gwen Steeles, Hazel Grove, Cheshire.
TS Bagot, St Ives, Cornwall.
M James, Stanley, Co Durham.
Chris Allen, Primrose Hill, Huddersfield.
Clare Rea, East Dereham, Norfolk.

Runners-up:
Christopher Curtis, Knightswood, Glasgow.
C Rowlands, Stanley, Co Durham.
Colin McBurnie, Dewsbury W Yorks.
Clifford Cooper, Brighton, East Sussex.
Paul Benyon, Northfleet, Kent.

## ANIMATE ME



An image of the Earth created with *Lightwave 3D*. The best 3D animation package available for the Amiga.

I own an Amiga 1200, I have done so since last year and I am extremely interested in the subject of animation. I have read many articles in your magazine about how good the Amiga is at animation and I was wondering if you could please help me out by answering a few questions I have.

1) What form of animation is the Amiga 1200 best at (2D, 3D, etc) and what, therefore, is the best package for it?

2) I am considering purchasing a video digitiser for my machine and there are many on the market. Which is the best one for grabbing single frames in colour and what supporting pieces of hardware/software are required?

3) What finally, in your opinion, is the best desktop set-up, such as software, hardware and accessories? What would be the rough cost if I was considering using my Amiga 1200 professionally in the near future and what would

be the best set-up if I had a larger amount of money?

**Howard Pearse, Surrey**

*1) It would be best to decide which sort of animation you want to do first – the Amiga is equally good at both (although the 3D stuff is more impressive!).*

*The best 2D animation package is probably Gold Disk's Movie Setter (although you might have problems getting hold of a copy). For 3D animation, well, there's no beating LightWave 3D (contact PremierVision on 071-721 7050).*

*2) Rombo's Vidi Amiga 12 AGA system will do the job nicely (Rombo are on 0506 414631).*

*3) Remember that it's not the equipment you have, it's what you do with it that counts. You would be best to start doing some simple animation (DPaint III will do the trick) and see if you enjoy it, before you start taking out any huge bank loans!*

someone change the rules while I was asleep?

2) OK, let's say I've chosen my lingo – now which package do I get? I don't wish to re-mortgage granny just yet, so something professional like Lattice for *C* is out. What about Aztec? Helios Forth? Are the PD releases up to it or not? I note from the latest ish of *AF* that your *Complete Amiga C* offer is sold out. Thieves! Fire! Murder!

3) Documentation – I borrowed a book on *C* to whet my appetite and came to the opinion that it was an excellent and eco-viable alternative to barbecue lighting fluid – don't try this at home kids.

Whichever language I choose, I need a text that is clear, concise and doesn't read like a Kafka novel.

**Simon Kay, Lancashire**

*1) Well, it really depends what you want to do. If you want to write games, you need to use Assembler; if you just want to code applications, use* C.

*2) HiSoft's Lattice C is the one to go for: Aztec isn't readily available in the UK, an Helios Forth is crap. HiSoft are contactable on 0525 718181.*

*3) Bruce Smith (call 0923 894355) do a good book on* C *programming called*

Mastering Amiga C. *Terrible plot, though – the getchar(!); did it.*

### WIRED

Whatever happened to the DIY sections of *Amiga Format*? I always thought it was the best part of the magazine, apart from the Coverdisks of course.

I have made myself a sound sampler, four-way joypad adaptor and loads of other useful gadgets. I know that I have been a bit slow in writing this letter, but I have only just got a printer and my handwriting is appalling – so appalling that I sometimes have trouble reading it myself.

I would dearly appreciate it if you started up the DIY section because I strive to know how to create a buffered parallel port splitter.

**Andrew Peel, West Yorkshire**

*Buffered parallel port splitter. Phwoar, eh? Eh?*

*Ahem. You'll be pleased to hear that the DIY section (we prefer the term, Amiga Format* Projects) *will soon be making a comeback. Nick Veitch has plans to show you how to build a thermonuclear detonator/lightpen combo. Or something. Stay tuned.*

## THE MAN AT THE TOP
**Write to Commodore UK managing director David Pleasance c/o *Amiga Format*, 30 Monmouth St, Bath BA1 2BW.**



### SHOOTING US IN THE FOOT

How I laughed in 1988 when I bought an A500 and my friend bought an Atari ST! How I chortled when I saw people rushing to 'upgrade' to Workbench 1.3 only to see Commodore release the A500+ a few months later, and how I guffawed when my chums bustled to buy the A600 only to see me purchase an A1200 after only a matter of weeks!

Unfortunately, though, the days of laughing at CDTV owners have gone. I find it hard to see how Commodore can still manage to rustle up an army of dedicated Amiga owners who stick by them through thick and thin when they continually keep shooting us in the foot!

I want CD32! OK, I suppose I could buy one. I'd have to get a bigger desk but I could save up and buy one. Frankly though, my bread bin is more aesthetically pleasing than a CD32 and the last time I did my shopping at Sainsbury's they provided a more robust form of packaging just so I could get my waffles home.

I have just read with a degree of horror that by late Spring a CD drive will be available – for the A4000! 'The CD32 has a completely different gate array to the A1200'. Well does it indeed? Presumably this pitiful excuse means that the insignificant few Commodore know as 'customers' have been shafted again?

I suppose though even if I do stay with the dwindling Amiga it won't be long before my entire system is replaced by a far superior, but tragically-supported A1200 – either that or a CD32-II in a decent box that no one writes software for?

Sort yourself out please Commodore, PCs are getting better and cheaper all the time. I think I probably speak for many when I say that loyalties can only go so far!

**Anthony Gallagher, London**

*What a confusing letter!*

*I can't remember having seen so many mixed messages on one page before, but nevertheless I will try to respond to your points.*

*If I understand you correctly you enjoyed the benefits of being an Amiga 500 owner and subsequently an A1200 owner, whilst feeling sorry for your friends who had just purchased A600s. Of course not everybody could afford the higher specification A1200 and for them the Amiga 600 was excellent value for money.*

*If you want a CD32 – buy one. If you don't like its looks – don't buy one, it's your choice.*

*In your next paragraph I take you to mean that you want a CD-ROM for your Amiga 1200. Well, you will be getting one, around the same time as the A4000 owners will, but it will not support FMV. If you want FMV buy a CD32.*

*Inevitably we will produce a higher spec machine than the A1200, it's called progress, it's what many people want. I would be interested to know what you mean by 'tragically-supported' and also why you are under the misconception that no one is writing software for the CD32.*

*You clearly have no idea what you want, and I strongly suggest you call into your local PC store, check out what it will cost to add a sound card, graphics board, etc, etc, and you will still end up with a computer that cannot perform like an Amiga.*

# THE GALLERY SPONSORED BY



DMA Design Ltd

Join Jason 'Tony Hart' Holborn as he takes another trip into the Amiga Format gallery.

## TESTAROSSA

*By John Cung, London*

This object of John's desire was drawn completely by hand using just a copy of *DPaint IV* on an Amiga A1200 running in 256 colours. What makes it so interesting is the wonderful rendering and the beautiful reflections off the paintwork.

DMA Design are giving away a Tabby Graphics tablet worth £54.99 for the best Gallery picture. Plus, you could be commissioned to produce artwork for DMA, the team behind *Lemmings* and *Hired Guns*. Please indicate clearly if you don't want your details passed on to DMA. Send entries to: *Amiga Format*, Gallery, 30 Monmouth St, Bath, Avon BA1 2BW.

## YOSEMITE SAM

*By Tommy Herbert, Wicken*

This is Steve 'Tall Scotsman' McGill's favourite. Steve particularly liked Sam's face (plenty of character) although the image is let down somewhat by the rather poor rendering of the Yosemite's hands.

## FLANKER

*By Damian Christon, Whaddon*

This image took more than 30 hours to generate on an A1200 with a 28MHz '030 processor running the *AF53 Imagine 2.0* Coverdisk. Damian then loaded it into *DPaint IV AGA* to soften the shadows.

## FALCON

*By Nils Erichsen, Norway*

Because I'm a *Star Wars* fan, this image had to appear in the Gallery. Produced using *Real 3D 1.4* and *DPaint*, it blurs the boundaries between ray-traced images and traditional drawing techniques.

## MCLAREN F1

*By Graham Dean, Stockport*

To get the best possible anti-aliasing, Graham Dean rendered this beautifully-detailed McLaren F1 car at a resolution of 1,280x1,024 using *Imagine 3.0*. The image was then scaled down to a more manageable size using an image processing program.

## THE TROOPER

*By Kris Booghmans, Belgium*

I'm not really a fan of Iron Maiden but this image is so striking that it just had to appear. Based on an Iron Maiden album cover, it has been completely hand-drawn using just 32 colours. The detail is astounding as are the perspective and proportions.

## BUTTERFLY

*By Paul Hill, High Wycombe*

This 256-colour image was drawn entirely freehand using nothing more than a few colour photographs as source material. The basic outline and colour of the butterfly were first traced and then detail was added using spreads of colour.

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# AMIGA FORMAT

You may recognise this page. You may be thinking: 'crikey this looks awfully similar to the Next Month page from *AF64*.' Well it is. In fact, it's the same (apart from the bit you're reading now). We made a mistake. But if you promise not to tell our publisher, next month in the world's best-selling Amiga magazine we *will* blow the lid on RISC technology. And we'll *definitely* tell you what to expect from the next generation machines and whether you'll soon be running *Windows* on your A5000 – don't miss it.

**1283-576/94 RISC601A**

# ISSUE 66
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